8. How does the woman help the man?

(A) She traces the history of architectural design.
(B) She offers to help him study for an examination.
(C) She contrasts the details of two design styles.
(D) She promises to speak to their professor.

9. Indicate whether each sentence below describes Art Deco or Art Moderne.

For each sentence, click in the correct box.

	Art Deco	Art Moderne
This style has straight lines, slender forms, and geometric patterns.		
This style has rounded corners, smooth walls, and little decoration.		
This is the style of a downtown building that the woman likes.		

10. What can be inferred from the conversation?

(A) The students' professor is not available for help outside class.
(B) The man does not care much about the history of design.
(C) The students are required to do a project for their design class.
(D) The woman's father is the superintendent of an office building.

TEST 4 , Track 4

11. What is the main purpose of the lecture?

(A) To instruct in the cultivation of wild squash
(B) To describe how hunter–gatherers found food
(C) To compare agriculture around the world
(D) To explain how early people started farming

12. What is probably true about the origins of agriculture?

(A) The process of gathering wild food led naturally to farming.
(B) Agriculture and written language developed at the same time.
(C) People around the world tried similar experiments with squash.
(D) The cultivation of vegetables occurred before that of grains.

13. The professor explains how the early people of Mexico probably started farming. Summarize the process by putting the events in order.

Drag each sentence to the space where it belongs.

(A) The people began to protect the plants.
(B) The people brought seeds to their camp.
(C) New plants grew from the fallen seeds.
(D) Seeds fell to the ground as the people ate.

1	
2	
3	
4	

14. Why did the people begin to use digging sticks?

(A) They found that water would fill the holes they made.
(B) They noticed that seeds grew better in turned–over soil.
(C) They dug trenches around the garden to keep out animals.
(D) They discovered that food could be stored underground.

15. Listen again to part of the lecture. Then answer the question.

Why does the professor say this:

(A) To show that people could not work in their gardens at night.
(B) To emphasize the amount of effort it took to protect the plants.
(C) To point out that agriculture developed over a very long time.
(D) To explain why squash was a particularly successful crop.

16. What point does the professor make about the transition from hunting–gathering to agriculture?

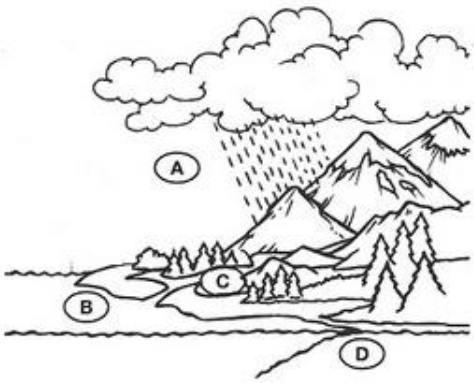
(A) The process probably followed a similar pattern around the world.
(B) The transition to agriculture eliminated the need for hunting.
(C) Agriculture developed everywhere in the world at the same time.
(D) The rapid move to agriculture led to environmental devastation.

TEST 4, Track 5

17. What is the hydrologic cycle?

(A) The economic issues concerning water
(B) The movement of water through the earth and atmosphere
(C) The changes in the amount of rain throughout the year
(D) The absorption of water vapor into the atmosphere

18. Identify the area in the diagram that mainly concerns climatologists.



19. What do hydrologists mainly study?

(A) The role of solar energy in the cycle
(B) Water movement and storage on land
(C) Biological reactions that use water
(D) Atmospheric circulation of water

20. What happens to water that falls to the earth as precipitation?

Click on two answers.

[A] It is stored in lakes or underground.
[B] It evaporates before reaching the ground.
[C] It eventually flows back to the ocean.
[D] It raises the temperature of the soil.

21. Why does the professor say this:

(A) To describe the importance of runoff and groundwater
(B) To compare the amount of runoff with that of groundwater
(C) To show similarities between runoff and groundwater
(D) To explain how runoff eventually becomes groundwater

22. What can be inferred about plants in the hydrologic cycle?

(A) Plants remove excess water from the cycle.
(B) Water moves quickly through plants.
(C) Plants perform the function of water storage.
(D) Plants recycle more water than animals do.

TEST 4, Track 6

23. Which of the following best describes the organization of the lecture?

(A) A list of influential painters
(B) A history of an art movement
(C) A comparison of schools of art
(D) A description of a painting

24. What is the professor's point of view concerning the Group of Seven?

(A) They created a distinctive Canadian art inspired by Canada itself.
(B) They produced a style of painting that was crude and barbaric.
(C) They deserve more attention than they have received.
(D) They influenced new trends in Canadian literature and music.

25. Listen again to part of the lecture. Then answer the question.

Why does the professor say this:

(A) To explain why the Group's work was misunderstood
(B) To state that the Group earned very little money
(C) To contrast the methods of different artists in the Group
(D) To show how one artist inspired the Group's direction

26. What subjects did the Group of Seven paint?

Click on two answers.

[A] Active street scenes
[B] Jack pine trees
[C] Sailing ships
[D] Uninhabited landscapes

27. What does the professor mean by this statement:

(A) Art lovers pay high prices for the Group's paintings.
(B) Canada has more painters now than at any time in the past.
(C) Much of the Group's work has come to represent Canada.
(D) People come from all over the world to study Canadian art.

28. Listen again to part of the lecture. Then answer the question.

What can be concluded about the Group of Seven's style of painting?

(A) The Group did not share a single style of painting.
(B) All artists in the Group followed the style of Jackson.
(C) Three artists are responsible for the Group's style.
(D) The Group started the abstract style of painting.

TEST 4, Track 7

29. What is the talk mainly about?

(A) The changing concept of leadership
(B) Leaders of the restaurant industry
(C) How leadership and power are related
(D) Why too much power can lead to evil

30. Why does the professor talk about the headwaiter in a restaurant?

(A) To show that having power doesn't imply leadership
(B) To compare the quality of service in two restaurants
(C) To explain how leaders influence other people
(D) To give an example of leadership in everyday life

31. Why does the professor say this:

(A) To explain why dictators have so much power
(B) To distinguish between leaders and power holders
(C) To compare qualities of dictators and robbers
(D) To warn students about the presence of danger

32. According to the professor, how are leadership and power similar?

(A) Both require the ability to exercise physical force.
(B) Both are benefits one gets from a university education
(C) Both are necessary for people who commit crimes.
(D) Both involve the ability to bring about wanted results.

33. According to the professor, which of the following are sources of power?

Click on two answers.

[A] The ability to eat in a restaurant
[B] The ability to use physical force
[C] The ability to motivate people
[D] The ability to follow orders

34. Listen again to part of the talk. Then answer the question.

What does the professor imply about successful managers?

(A) They know how and when to use their power.
(B) Their leadership skills are present from birth.
(C) They are the only ones who can increase spending.
(D) Their power comes from the use of physical force.

Stop

Answers to Test 4 – Listening are on page 612.

Record your score on the Progress Chart on page 697.

TEST 4, Track 8

SPEAKING SECTION DIRECTIONS

The Speaking section measures your ability to speak in English about a variety of topics. There are six questions in this section. Record your response to each question on a cassette.

Questions 1 and 2 are independent speaking tasks in which you will speak about familiar topics. Your responses will be scored on your ability to speak clearly and coherently about the topics.

Questions 3 and 4 are integrated tasks in which you will read a passage, listen to a conversation or lecture, and then speak in response to a question about what you have read and heard. You will need to combine relevant information from the two sources to answer the question completely. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

Questions 5 and 6 are integrated tasks in which you will listen to part of a conversation or lecture, and then speak in response to a question about what you have heard. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You will hear each conversation and lecture only one time. You may take notes while you listen. You may use your notes to help you answer the questions.

Stop

For questions 1 and 2, you will speak in response to a question about a familiar topic. Use your own personal knowledge and experience to answer each question. After you hear the question, you have 15 seconds to prepare your response and 45 seconds to speak.

QUESTION 1

TEST 4, Track 9

> What foreign country would you like to visit? Choose a country and explain why you would like to go there. Include details and examples to support your explanation.

Stop

Preparation Time – 15 seconds
Response Time – 45 seconds

QUESTION 2

TEST 4, Track 10

> In some schools, teachers decide what classes students must take. Other schools allow students to select their own classes. Which system do you think is better and why? Include details and examples in your explanation.

Stop

Preparation Time – 15 seconds
Response Time – 45 seconds

QUESTION 3

In this question, you will read a short passage about a campus situation, listen to a conversation, and then speak in response to a question about what you have read and heard. After you hear the question, you have 30 seconds to prepare your response and 60 seconds to speak.

Reading Time – 45 seconds

NOTICE OF CHANGE TO SWIMMING POOL HOURS

Due to an increase in the number of swimming classes being offered to both university students and the general public, the university must reduce the hours that the pool is open for the personal use of students. The main change is that the pool will be closed to university students on Monday and Wednesday evenings after 3:00 p.m. The pool will be available to university students from 9:00 a.m. to 3:00 p.m. seven days a week, and from 7:00 p.m. to 10:00 p.m. on Tuesday, Thursday, and Friday evenings. The new pool hours will go into effect beginning on January 5.

Now cover the passage and question. Listen to the recording. When you hear the question, uncover the question and begin preparing your response.

TEST 4 , Track 11

The man expresses his opinion about the change in swimming pool hours. State his opinion and explain the reasons he gives for holding that opinion.

Stop

Preparation Time – 30 seconds
Response Time – 60 seconds

QUESTION 4

In this question, you will read a short passage on an academic subject, listen to a lecture on the same topic, and then speak in response to a question about what you have read and heard. After you hear the question, you have 30 seconds to prepare your response and 60 seconds to speak.

Reading Time – 45 seconds

CHIROPRACTIC

Chiropractic is a medical practice based on the interactions of the spine and the nervous system. According to chiropractic theory, disease results from a disruption or slowing of nerve function when the vertebrae, the bones that make up the spinal column, are not in their proper position. The method of treatment is to adjust and align the vertebrae. Chiropractors, doctors of chiropractic medicine, use their hands to massage and manipulate the patient's spine in order to relieve pressure on nerves and thus treat disease. Chiropractors typically complete nine years of academic and clinical education.

Now cover the passage and question. Listen to the recording. When you hear the question, uncover the question and begin preparing your response.

TEST 4, Track 12

> Describe the patient's symptoms, and explain why chiropractic treatment was recommended. Explain how this patient's experience supports the practice of chiropractic.

Stop

Preparation Time – 30 seconds
Response Time – 60 seconds

QUESTION 5

In this question, you will listen to a conversation. You will then be asked to talk about the information in the conversation and to give your opinion about the ideas presented. To make this practice more like the real test, cover the question during the conversation. After you hear the question, you have 20 seconds to prepare your response and 60 seconds to speak.

TEST 4, Track 13

> The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Stop

Preparation Time – 20 seconds
Response Time – 60 seconds

QUESTION 6

In this question, you will listen to part of a lecture. You will then be asked to summarize important information from the lecture. To make this practice more like the real test, cover the question during the lecture. After you hear the question, you have 20 seconds to prepare your response and 60 seconds to speak.

TEST 4, Track 14

> Using points and examples from the lecture, describe fears that young children experience, and explain how these fears help children.

Stop

Preparation Time – 20 seconds
Response Time – 60 seconds

Key points for Test 4 – Speaking are on page 613.

Each response earns a score of 1, 2, 3 or 4.

Record your total score on the Progress Chart on page 697.

TEST 4, Track 15

WRITING SECTION DIRECTIONS

The Writing section measures your ability to use writing to communicate in an academic environment. There are two writing questions.

Question 1 is an integrated writing task. You will read a passage, listen to a lecture, and then answer a question based on what you have read and heard. You have 20 minutes to plan and write your response.

Question 2 is an independent writing task. You will answer a question based on your own knowledge and experience. You have 30 minutes to plan and write your response.

Stop

QUESTION 1

For this task, you will write a response to a question about a reading passage and a short lecture. The question does not ask you to express your personal opinion.

Read the passage and then listen to the recording. To make this practice more like the real test, cover the passage and question during the lecture. You may take notes, and you may use your notes to help you write your response. When you hear the question, uncover the passage and question. Then allow 20 minutes to plan and write your response.

Typically, an effective response will have 150 to 225 words. Your response will be evaluated on the quality of your writing and on the completeness and accuracy of the content.

Reading Time – 3 minutes

During every season of the year, earthworms and other soil dwellers are continuously at work in forests and gardens. The activities of earthworms have a beneficial effect on the physical and chemical properties of the soil. Earthworms are responsible for mixing forest duff—the decaying organic matter on the forest floor—deeper into the soil. This breaks down the layers of soil and several inches of the hardpan below. Earthworms aerate the soil by their burrowing, and they add mucus that holds the fine soil particles together.

In the garden, earthworms do the same thing: they move organic matter from the surface deeper into the soil. They play an essential role in the compost pile, where they feed on grass clippings and other plant matter and excrete the indigestible portions as castings, which are then eaten by beneficial soil microbes. In this way, earthworms accelerate the decomposition of the compost pile and aid in the production of organic fertilizer.

Among sports fishers who use a hook and line, earthworms are the bait of choice. The most popular bait worms are large night crawlers and the smaller common species known as *Lumbricus rubellus*. Both kinds of worms are readily available in fishing shops or the old-fashioned way: by digging in the back yard.

Several species of earthworms are native to North America, but many of the species that are most abundant today originally came from Asia, Europe, or Africa, having crossed the ocean by hiding among plant roots or other cargo in ships' holds. With the help of gardeners and sports fishers, worm populations continue to spread across the continent, moving at the astonishing speed of five to ten meters a year. Earthworms are an important link in the food web since they are a food source for numerous species of animals.

Now cover the passage and question. Listen to the recording. When you hear the question, uncover the passage and question and begin your response.

TEST 4, Track 16

> Describe the problems caused by earthworms in forest ecosystems, and explain how these problems contradict information in the reading.

Stop

Writing Time – 20 minutes

QUESTION 2

For this task, you will write an essay in response to a question that asks you to express, explain, and support your opinion on a topic. You have 30 minutes to plan, write, and revise your essay.

Typically, an effective essay will have a minimum of 300 words. Your essay will be evaluated on the quality of your writing, including the organization and development of your ideas and the quality and accuracy of the language you use to express your ideas.

Read the question below and make any notes that will help you plan your response. Then begin typing your essay.

> Some people think that we learn our most important lessons in school. Others think that the knowledge we acquire outside of school is the most important. Which view do you agree with? Use specific reasons and examples to support your opinion.

Writing Time – 30 minutes

Key points for Test 4 – Writing are on page 614.

Each response earns a score of 1, 2, 3, 4 or 5.

Record your total score on the Progress Chart on page 697.

ANSWER KEY

PART 1 – READING

EXERCISE 1.1.A (p. 20)

1. B Clues: *...the introduction of images—powerful, realistic, moving images—into our everyday communication; ...marriage of words and images....*
2. D Clues: *Computing has spawned new forms of media, such as...the Internet.*
3. D Clues: *...imported exotic animals to sell to traveling showmen...; ...words such as lion or polar bear...; The creatures made such an impression that American English began to acquire new phrases.*
4. B Clues: *To monkey around and monkey business are expressions...to make a monkey out of someone... all being terms based on the increasing number of monkeys seen...; ...big ape...gorilla....*
5. A Clues: *Each tissue system is continuous throughout the plant's body.*
6. C Clues: *The dermal system, or epidermis, is a single layer of cells covering the entire body of the plant.*
7. D Clues: *The third system—the ground tissue—makes up the bulk of a plant, filling all of the spaces between the dermal and vascular tissue systems.*
8. B Clues: *Because of the rising demand for cotton from the mills of England,...the cotton production of the South increased tremendously; ...by the 1850s, output had soared to five million bales.*
9. A Clues: *Northern farmers would boast of... machinery....*
10. C Clues: *...just before the Civil War of the 1860s, the Southern states had developed an economic culture distinct from that of the North; The economic differences between the two regions would ultimately lead to armed conflict....*

EXERCISE 1.1.B (p. 23)

1. D Clues: *The child develops a sense of industry; If the child is encouraged to make and do things, allowed to finish tasks, and praised for trying, a sense of industry is the result.*
2. D Clues: *...if the child's efforts are unsuccessful, or if they are criticized or treated as bothersome, a sense of inferiority is the result.*
3. A Clues: *Erik Erikson believed that personality development is a series of turning points, which he described in terms of the tension between desirable qualities and dangers; ...Erikson called the period from age six to eleven Industry vs. Inferiority.*
4. C Clues: *In the storytelling traditions of West Africa, the tiny rabbit appears frequently as a rascal who teases or plays jokes on bigger animals.*
5. C Clues: *Joel Chandler Harris, a journalist in Georgia...; Harris wrote down and published many of the stories, popularizing them for the general public.*
6. B Clues: *...a trickster rabbit in the character of Brer Rabbit; ...similar versions of the same stories in southern Louisiana, where the rabbit character was known as Compair Lapin...; ...Bugs Bunny—a rascally rabbit who causes trouble, tricks the hunter....*
7. B Clues: *A hot spot is a giant underground caldron of molten rock in one of the world's many volcanically active areas.*
8. B Clues: *Annually, more than 200 geysers erupt in Yellowstone, making this one of the most interesting places in the world for geologists.*
9. C Clues: *The rock heats the water, and the boiling water and steam often make their way back up to the surface in the form of a geyser...; ...pressure builds up, eventually forcing the superheated water to burst to the surface as a geyser.*
10. A Clues: *If the water does not make it all the way to the surface, steam and gases may dissolve rocks and form a bubbling mud pot instead.*

EXERCISE 1.1.C (p. 26)

1. A Clues: *Organic compounds contain atoms of the element carbon, usually combined with itself and with atoms of one or more other elements....*
2. C Clues: *Important organic polymers include carbohydrates, proteins, and nucleic acids.*
3. D Clues: *Most animals, including humans, can manufacture about ten of these amino acids in their cells, but the other ten, called essential amino acids, must be obtained from food in order to prevent protein deficiency.*
4. C Clues: *The oldest of the resource commodities, fish, was traditionally associated with Newfoundland....*
5. D Clues: *...the fur trade was of tremendous value politically because it provided the means for Great Britain to retain its claim over much of Canada....*
6. A Clues: *By the 1840s, British North America had developed a vibrant commercial economy based on its abundant natural resources....; Fish, furs, timber, and grains represented over 90 percent of all economic activity.*
7. B Clues: *...she worked at Johns Hopkins in the laboratories...; Reed's research in pathology....*
8. A Clues: *In 1906, her marriage...took Reed away from the research laboratory; For ten years, she remained at home....*
9. C Clues: *...she concluded that she could not imagine life without her husband and sons, but she hoped for a future when marriage would not have to end a career of laboratory research.*
10. C Clues: *Reed's research in pathology established conclusively that Hodgkin's disease...was a distinct disorder characterized by a specific blood cell, which was named the Reed cell after her.*

EXERCISE 1.2.A (p. 32)

1. C The passage does not mention writing dialogue for characters. All the other answers are mentioned: *Another aspect is costumes...; ...a presentation by performers in front of an audience...; ...drama involves storytelling....*
2. D The passage does not give sun avoidance as a factor that can cause skin cancer; rather, sun avoidance is given as the most effective preventative measure. All the other answers are given: *...exposure to x-rays...; Chronic sun exposure—especially when it causes sunburn or blistering—results in more skin cancer...; ...family history of the disease.*

3. B Laughter does not increase the body's vulnerability to illness; rather, it is stress hormones that increase vulnerability to illness. All the other answers are given as benefits of laughter: *...boosts brain chemicals that fight pain; ...increase hormones that have been shown to help produce restful sleep; ...diminish feelings of tension, anger....*
4. A The author does not recommend playing tricks on family and friends. All the other answers are recommended: *...create a weekly fun time to look forward to...; ...spending time with children and animals; ...try keeping a humor journal in which you record some of the amusing things that happen to you.*
5. B The passage does not state that plants in the *Apiaceae* family are native to one–fourth of the United States. All the other answers describe the *Apiaceae* family: *...3,000 species of the Apiaceae family exist in the Northern Hemisphere; ...aromatic herbs...foods...spices and seasonings...some species are very poisonous; ...small flowers...that are further grouped into a compound cluster.*
6. B Potatoes are not members of the *Apiaceae* family. All the other answers are given: *carrots, parsnips...parsley....*
7. A The passage does not state that the films of Satyajit Ray are characterized by adventure. All the other answers are given: *Ray's films are known for their compassion, honesty, and quiet dignity.*
8. C The third film of the Apu Trilogy does not deal with struggle against poverty—that is a theme of the first film. All the other answers are themes of the third film: *...the young man...fails at his life's ambitions, and then, after losing his wife, he wanders across the country for several years before returning home....*
9. C The passage does not mention diaries as something studied by archaeologists. All the other answers are mentioned: *...weapons...; ...items used in religious ceremonies...; ...ruins of buildings....*
10. A Archaeologists do not plan and design more efficient uses for objects and materials. All the other answers are given: *...archeologists establish the sequence of events that occurred in a given place and time period; ...these objects lie buried in the ground, so our image of the archeologist is of a scientist who is always digging; ...document how big changes occurred in the way peoples exploited their environment and one another.*

EXERCISE 1.2.B (p. 36)

1. B Clues: *The enlargement of the electorate...has increased the importance of parties to the point where it is practically impossible for a candidate to get elected without the support of a party organization.* (1.1)
2. D The passage does not state that voters prefer candidates that express the values of an established party. All the other answers are given: *The job of influencing popular opinion through newspapers, television, the Internet, and other mass media is too complicated...; ...the variety of issues facing nation states has complicated the problem of creating an informed electorate...; Building political support on a nation–wide scale carries a high cost....*
3. B The passage does not state that coral reefs have caused sea–surface temperatures to rise. All the other answers are given: *Coral reefs are one of the earth's most ancient ecosystems...; The brilliant blue, purple, green, gold, and pink have begun to disappear as a disease called bleaching drains the color and the life from the reefs; The huge cities built by corals provide shelter and food for billions of other marine animals.*
4. D Rising water level is not given as an effect of the bleaching of coral reefs. All the other answers are given: *...bleaching drains the color...; Millions of aquatic animals that depend directly or indirectly on corals have died as well...; Bleaching has killed more corals....*
5. D Clues: *...so different from one another...had less to do with their use of plants than with their use of animals; The Native Americans' relationship to the deer, moose, and beaver...was far different from that of the Europeans to the pigs, cows, sheep, and horses....* (1.1)
6. A European settlers did not raise deer. All the other answers are given: *...Europeans...the pigs...sheep, and horses they owned.*
7. B Burning the woods was not an agricultural practice of the Europeans; it was a practice of the Native Americans. All the other answers are given: *...the Europeans were responsible for a host of changes in the New England landscape: endless miles of fences...; ...the plow...characteristics of European agricultural practices; ...new fields covered with grass, clover....*
8. C Landscape architects do not draw or paint scenes from the natural environment. All the other answers are given: *Landscape architects design landscapes in residential areas, public parks, and commercial zones; They usually plan the arrangement of vegetation, walkways, and other natural features of open spaces.*
9. B The passage does not list building a fence around the construction site as a stage in the landscape design process. All the other answers are listed: *...landscape architects first consider the nature and purpose of the project, the funds available...; ...they prepare working drawings to show all existing and proposed features; They outline the methods of constructing features and draw up lists of building materials.*
10. C Clues: *Newcomers to the field usually start as junior drafters...doing other simple drafting work for architectural, landscape architectural, or engineering firms.* (1.1)

QUIZ 1 (p. 41)

1. B Clues: *...small, relatively harmless amounts of ionizing radiation, known as background radiation...; However, other types of ionizing radiation...have the potential to harm the human body.* (1.1)
2. A Clues: *Most damage occurs in tissues with rapidly dividing cells....* (1.1)
3. A Genetic defects are not an example of somatic damage; they are an example of genetic damage. All the other answers are examples of somatic damage: *The second type of damage is somatic, which causes victims direct harm in the form of burns...eye cataracts...cancers of the...lung.* (1.2)

4. D Clues: *Exposure to a large dose of ionizing radiation over a short time can be fatal within a few minutes to a few months later.* (1.1)
5. C Clues: *...the populations of most North American canids...have decreased greatly. The coyote, however, has thrived alongside humans, increasing in both numbers and range.* (1.1)
6. B The passage does not state that the coyote uses its distinctive call to trick and catch prey. All the other answers are given: *This call keeps the band alert to the locations of its members; One voice usually prompts others to join in, resulting in the familiar chorus...; ...its scientific name, canis latrans, means "barking dog."* (1.2)
7. D Clues: *In feeding, the coyote is an opportunist, eating rabbits, mice...and carrion—whatever is available.* (1.1)
8. D Clues: *Often a badger serves as involuntary supplier of smaller prey: while it digs for rodents at one end of their burrow, the coyote waits for any that may emerge from an escape hole at the other end.* (1.1)
9. C Clues: *Man is the major enemy....* (1.1)
10. A The passage does not state that the coyote is a serious threat to human activities. All the other answers are given: *The best runner among the canids...a strong swimmer...does not hesitate to enter water after prey; ...the coyote may team up with one or two others, running in relays to tire prey...; ...the coyote population continues to grow, despite efforts at trapping, shooting, and poisoning the animals.* (1.2)

EXERCISE 1.3.A (p. 48)

1. C The referent of *it* is something that is commonly a hare in Asia and Europe. The previous sentence introduces the topic of a favorite imagined figure seen in the moon's surface. Logic tells you that *it* refers to *favorite imagined figure*.
2. D The referent of *another* is the object of *to* in a *from...to* phrase. Logic and sentence structure tell you that *another* refers to *form*.
3. C The referent of *this area* is something in which young people must develop their ability. The previous sentence introduces the topic of *public speaking skills*. Logic tells you that *this area* refers to *public speaking*.
4. B The referent of *Others* is something of which *Stravinsky* is an example. The subject of the previous sentence is *Some composers*. Logic tells you that *Others* refers to *composers*.
5. C The referent of *them* is something that can be identified as being "higher" or "lower." The sentence discusses differences among people. Logic tells you that *them* refers to *people*.
6. C The referent of *they* is something that constitutes a social class. The subject of the sentence's first clause is *large number of families*. Logic tells you that *they* refers to *large number of families*.
7. C The referent of *those* is someone *born in the 1920s*. The sentence discusses current generations of adults. Logic tells you that *those* refers to *adults*.
8. D The referent of *them* is someone of whom one-third are caring for children. The sentence discusses unmarried couples. Logic tells you that *them* refers to *unmarried couples*.
9. A The referent of *them* is something to which insects develop genetic resistance. The subject of the passage is *pesticides*. Logic tells you that *them* refers to *pesticides*.
10. B The referent of *Some* is something that is absorbed from an organism's environment. The subject of the previous sentence is *chemicals*. Logic tells you that *Some* refers to *chemicals*.

EXERCISE 1.3.B (p. 51)

1. B The referent of *These* is something that was promoted in books and magazines. The subject of the previous sentence is *guiding principles*. Logic tells you that *These* refers to *guiding principles*.
2. B The referent of *them* is someone or something that was empowered by art societies and social-reform clubs. The subject of the sentence is *women*. Logic tells you that *them* refers to *women*.
3. C The referent of *one* is something that was planted in mass beddings. The referent is also the object of *to* in a *from...to* phrase. Logic and sentence structure tell you that *one* refers to *flower*.
4. C The referent of *them* is something that the climatic zones of North America did not always suit. The subject of the sentence is *tulips*. Logic tells you that *them* refers to *tulips*.
5. B The referent of *Both* is two things that echo many of the themes of earlier philosophies. The previous sentence discusses the relationship between phenomenology and existentialism. Logic tells you that *Both* refers to *phenomenology and existentialism*.
6. D The referent of *the latter* is someone or something that theorized about the hierarchy of human needs. The referent is also the second of two things mentioned. The previous sentence mentions the thinkers Martin Buber and Abraham Maslow. The second person mentioned is Abraham Maslow, so *the latter* refers to *Abraham Maslow*.
7. D The referent of *they* is something that is incorporated into the bone matrix. The sentence's first clause introduces the idea of adequate amounts of calcium and phosphorus. Logic tells you that *they* refers to *calcium and phosphorus*.
8. A The referent of *it* is something that is exposed to sunlight. The subject of the sentence is *skin*. Logic tells you that *it* refers to *skin*.
9. D The referent of *it* is something that causes bowing of the legs in a child with rickets. The subject of the sentence's first clause is *gravity*. Logic tells you that *it* refers to *gravity*.
10. C The referent of *the disease* is something of which a vitamin D deficiency will increase the severity. The previous two sentences discuss the causes and effects of osteoporosis. Logic tells you that *the disease* refers to *osteoporosis*.

QUIZ 2 (p. 54)

1. B Clues: *...suspects Dr. Caligari, a mountebank...of being responsible for a series of violent crimes. Caligari's instrument of crime is Cesare, a sleepwalker who is under the control of the evil doctor.* (1.1)
2. B The referent of *he* is someone who is the director of an insane asylum. The sentence mentions a search for the doctor. Logic tells you that *he* refers to *Dr. Caligari*. (1.3)

3. D Clues: *The film's expressionistic sets and lighting reflect the narrator's madness; Walls are slanted and windows triangular; Furniture is distorted and oversized, evoking a nightmare world of insanity.* (1.1)
4. A Clues: *The so–called expressionistic "street films" dealing with the lives of common people...; Director Fritz Lang's Metropolis....* (1.1)
5. C The passage does not give luxurious sets and furniture as a characteristic of expressionistic film. All the other answers are given: *Surreal effects of light and shadow...; ...evoking a nightmare world of insanity; Walls are slanted... Furniture is distorted....* (1.2)
6. D Clues: *However, a more accurate view shows that rural Canadians had access to considerable information.* (1.1)
7. C The referent of *those* is something of today that the daily newspapers of the period were more substantial than. Logic tells you that *those* refers to *daily newspapers*. (1.3)
8. D The referent of *them* is something about which rural Canadians held discussions at club meetings. The sentence mentions magazines and books. Logic tells you that *them* refers to *magazines and books*. (1.3)
9. B The passage does not state that the rural school provided public health clinics. All the other answers are given: *The local school served other functions besides providing formal education...; ...school districts were often the only sign of political organization...; ...one–room schoolhouse as a meeting place...a variety of social and cultural events.* (1.2)
10. C Clues: *...there was a growing exodus from farms to the city, mainly because smaller farms...were no longer able to support the entire family.* (1.1)
11. A Clues: *...artists and writers romanticized the family farm. In the novel Anne of Green Gables....* (1.1)
12. D Clues: *Two conditions are necessary for the formation of ice: the presence of water and temperatures below freezing. Ice in the atmosphere...can assume various forms, depending on the conditions under which water is converted to its solid state.* (1.1)
13. C Clues: *Ice that forms in the atmosphere can fall to the ground as...hail; Hail consists of rounded or jagged lumps of ice, often in layers....* (1.1)
14. A Sleet does not form on bodies of water; it forms in the atmosphere. All the other answers are forms of ice that form on bodies of water: *...the first ice to form is a thin surface layer of slush...; ...eventually grows into small floes of pancake ice; If the lake is small enough...the floes may freeze together into a fairly solid sheet of pack ice.* (1.2)
15. B Clues: *On very large bodies of water, it may not form until late winter because there must be several months of low temperatures to chill such large amounts of water.* (1.1)
16. B The referent of *it* is something that acts as an insulator. The subject of the sentence's first clause is *ice*. Logic tells you that *it* refers to *ice*. (1.3)
17. D Clues: *...ice is less dense than liquid water and therefore floats rather than sinks in water; Without the insulating effect of floating ice sheets, surface water would lose heat more rapidly....* (1.1)
18. A Clues: *Because most people do not volunteer to pay taxes or police their own financial affairs...; To accomplish these things, governments have to pass laws.* (1.1)
19. D The referent of *This* is something that can be seen in the growth of government taxation and spending. The previous sentence introduces the idea of governments playing an increasing role in economics. Logic tells you that *This* refers to *increasing role in economics*. (1.3)
20. C Clues: *...large–scale organizations—corporations, labor unions, and government structures—that have grown in importance...; Their presence and growing dominance have shifted capitalist economies... toward government administration of markets.* (1.1)
21. B Clues: *...laws for the conduct of economic activity that attempt to make it serve the public interest. For instance...laws to shield investors against fraud.* (1.1)
22. C The referent of *their* is someone or something that chooses representatives. The last part of the sentence lists the rights of workers. Logic tells you that *their* refers to *workers*. (1.3)
23. A The passage does not give stock ownership as an issue concerning the labor force. All the other answers are given: *...concerns the labor force, such as regulation of work hours...health and safety conditions...and the rights of workers...to strike....* (1.2)
24. D Clues: *Even governments that are reluctant to regulate commerce directly have undertaken large–scale projects...and other public services.* (1.1)
25. B The passage does not give small business ownership as an example of government participation in economic activity. All the other answers are given: *...governments...have been playing an increasing role in economics. This can be seen in the growth of government taxation and spending, in the growing share of national income devoted to income–support payments...; Even governments that are reluctant to regulate commerce directly have undertaken... transportation networks....* (1.2)

EXERCISE 1.4.A (p. 70)

1. D *Obstructed* means *blocked* in this context. Clues: *...what we consider taste is actually smell. If the sense of smell is -----, as by a head cold, the perception of taste is sharply reduced*; the prefix *ob–* = against; the stem *–struct–* = build.
2. A *Accounts for* means *explains* in this context. Clues: *...120 degrees—the same angle as the angles of a hexagon—which ----- the characteristic six–sided structure....*
3. B *Compile* means *put together* in this context. Clues: *...preparing the report...; ...how the report will be used...*; the prefix *com–* = together.
4. A *Split off* means *separated* in this context. Clues: *...had common origins but then ----- from one another several hundred thousand years ago.*
5. A *Indulge* means *participate* in this context. Clues: *...travel for pleasure was limited to the wealthy, but since then, improved standards of living and the availability of transportation have allowed more people to -----*; the prefix *in–* = into.

6. B *Exploded* means *expanded rapidly* in this context. Clues: *...the development of commercial jet airlines enabled fast internationai travel; Today, airports in nearly every country can accommodate jumbo jets full of tourists...*; the prefix *ex–* = out.
7. A *Grasp* means *understanding* in this context. Clues: *...must broaden and deepen their understanding...; ...some comprehension of...; ...must gain an understanding of....*
8. D *Pitfalls* means *hazards* in this context. Clues: *...its negative aspects, such as the sources of human conflict and the ----- of power.*
9. C *Foliage* means *mass of leaves* in this context. Clues: *...autumn leaves...; Red leaves...; Leaves that appear yellow....*
10. D *Masked* means *concealed* in this context. Clues: *Leaves that appear yellow in autumn are no less yellow in spring and summer. However, in spring and summer the yellow pigments...are ----- by the green pigment chlorophyll....* The yellow pigments do not appear in spring and summer because the green pigment conceals them.

EXERCISE 1.4.B (p. 73)

1. D *Crude* means *simple* in this context. Clues: *The moon with its earthshine acts as a ----- weather satellite by reporting, in a very simple way, the general state of terrestrial cloudiness.*
2. B *Glare* means *bright light* in this context. Clues: *As the phase of the moon progresses beyond a thin crescent...; ...the increasing ----- of the moon's growing crescent...; ...irradiation.*
3. A *Fleeting* means *temporary* in this context. Clues: *...withstood the ----- nature of most slang; ...has been around a long time. Most slang is temporary, meaning it changes rapidly, but cool has lasted a long time.*
4. C *Carry the same weight* means *have the same importance*. Weight means heaviness or, in this context, importance. Clues: *As long as...Birth of the Cool remains one of the best–selling jazz recordings of all time, cool will stay cool—it will ----- as it did more than 50 years ago.*
5. D *Scouring* means *scraping* in this context. Clues: *...removing most of the existing soil, and hollowing out countless lakes.*
6. C *Sustained* means *supported* in this context. Clues: *...attempts to bring them into agricultural use have been largely unsuccessful. However, the region's mineral wealth ----- both temporary and permanent settlements...*; the prefix *sus–* = under.
7. C *Talk over* means *explore* in this context. Clues: *...small–group discussions allow them to develop healthier ways to think about work; ...ways to make workplaces more ethical and just.*
8. A *In lockstep* means *alike* in this context. Clues: *Groups work best when they consist of people who have similar duties, responsibilities, and missions. This does not mean, however, that everyone in the group must think -----.*
9. B *Fuel* means *stimulate* in this context. Clues: *Finding the right subject matter...; ...several ways to ----- the discussion...; ...the company's mission statement...; ...readings on work and ethics...; ...specific workplace incidents....*
10. A *Overwhelm* means *dominate* in this context. Clues: *...the dynamics of the group should be balanced...; ...the discussion leader must not be allowed to ----- the conversation or the agenda; ...when the same person is not always in charge*; the prefix *over–* = too much.

EXERCISE 1.4.C (p. 76)

1. A *Wreak havoc on* means *disrupt* in this context. Clues: *...has a sharp impact on...; ...changes that can ----- precipitation patterns...; ...both delay and stimulate the fall of precipitation....*
2. C *Drenching* means *thoroughly wetting* in this context. Clues: *...both delay and stimulate the fall of precipitation, depriving some areas of rain while ----- others. While* shows contrast between *depriving some areas of rain* and *drenching*.
3. A *Hoisted* means *lifted* in this context. Clues: *...heavy amounts of heat and pollution rising from cities...; ...up in the sky....*
4. D *Torrential* means *heavy* in this context. Clues: *...a precipitation shortage...; By contrast...invigorate summer storm activity...allowing clouds to build higher and fuller.... By contrast* shows contrast between *precipitation shortage* and *torrential rains*.
5. C *Sentimentality* means *feeling* in this context. Clues: *So much ----- is attached to the rose...it is difficult to separate the original mythological and folkloric beliefs from the emotional excess....*
6. B *Invoked* means *called on* in this context. Clues: *...symbol of romantic love ----- by every minor poet and painter*; the prefix *in–* = on; the stem *–vok–* = call.
7. C *Decked* means *decorated* in this context. Clues: *...roses were to be planted on the grave.*
8. D *Plucking* means *picking* in this context. Clues: *...equated the rose with life, and they believed that when a child died, the figure of death could be seen ----- a rose outside the house.*
9. A *Token* means *symbol* in this context. Clues: *...association with female beauty; ...a ----- of all that is lovely and good; ...on the other hand, the rose was a symbol not of feminine but of masculine beauty.* The parallel use of *token* and *symbol* shows that they are similar in meaning.
10. C *Sub rosa* means *secretly* in this context. Clues: *...a sign of secrecy and silence; ...the intention of secrecy.*

EXERCISE 1.4.D (p. 78)

1. A Clues: *When "period" furniture became popular, American furniture factories attempted to duplicate various styles of French and English furniture of the seventeenth and eighteenth centuries.* A reproduction is a duplicate (copy) of something. (1.1)
2. C *Revolt* means *break* in this context. Clues: *...based not only on individualism but also on a return to simplicity and practicality...; represented a ----- from mass–produced furniture; ...departed greatly from the ornate and pretentious factory–made "period" furniture.... Individualism* contrasts with *mass–produced*, so *revolt* must indicate a change or break.
3. D *Primitive* means *simple* in this context. Clues: *...a return to simplicity and practicality; ...simple, straight lines....*

4. A *Hallmarks* means *features* in this context. Clues: *...possess the essential qualities of...; ...plain and unornamented...; ...simple, straight lines were the ----- of its construction.*
5. B Clues: *Craftsman furniture was plain and unornamented...; ...simple, straight lines....* (1.1)
6. B *Vitality* means *energy* in this context. Clues: *...rhythms of speech...; ...movement, and color of rural black culture*; the stem *–vita–* = life.
7. A *Calling* means *profession* in this context. Clues: *...continued her fieldwork...but eventually followed her most cherished -----, that of fiction writer.*
8. A *Autonomy* means *independence* in this context. Clues: *...freedom, -----, and self–realization, while also being...attached to a man*; the prefix *auto–* = self.
9. C *Out of touch* means that Hurston's opinions differed from those of most other people. Clues: *Hurston was criticized for not writing fiction in the protest tradition. Her conservative views...; ...the temper of the times.*
10. D *Revere* means *honor* in this context. Clues: *...it was only afterward that later generations...were to rediscover and ----- her celebrations of black culture. It was only afterward* shows contrast with Hurston's dying in poverty and obscurity, indicating that *revere* has a positive meaning.

QUIZ 3 (p. 81)

1. C *Sparsely populated* means that few people lived in the region. Clues: *...still two years away from becoming the state of Ohio; ...settlers of the Ohio frontier...; ...prepared the way for farms and towns...; When Chapman started his "apple seeding" in 1801, the population of Ohio was 45,000....* (1.4)
2. B *Pacifist* means *peace advocate* in this context. Clues: *He was a ----- in a time of warfare and brutality against the Indians, treating Indians and settlers alike with respect. Peace advocate* contrasts with *warfare* and *brutality*. (1.4)
3. C The passage does not state that Johnny Appleseed gave away meat; on the contrary, *He killed no animals and was a vegetarian*. All the other answers are given: *Journeying by foot...; ...constructing simple wooden fences...; ...exchanged knowledge of medicinal plants....* (1.2)
4. B *Marching* means *advancing* in this context. Clues: *...agricultural development...; ...ever–increasing pace...; ...more than forty percent of the land had been cleared of trees and converted to farms.* (1.4)
5. D *Subside* means *decrease* in this context. Clues: *Not until 1880 did the cutting of trees -----. By then, three–quarters of Ohio had been cleared, and people were becoming aware of the limits of expansion*; the prefix *sub–* = below, under. (1.4)
6. A *Primeval* means *original* in this context. Clues: *...the universe began...; ...yet even now...may be present; ...original universe....* (1.4)
7. D *Transition* means *change* in this context. Clues: *...gradually differentiated it...; ...expanded and cooled...*; the prefix *trans–* = across. (1.4)
8. C *Uniform* means *consistent* in this context. Clues: *...not completely...; ...some regions that were slightly denser and capable of generating stronger gravitational fields than others*; the prefix *uni–* = one; uniform = one form or type. (1.4)
9. B *Compact* means *dense* in this context. Clues: *Since gravity tends to pull matter together, the denser regions tended to become even more -----; evolved into denser clouds....* Gravity pulled the dense regions together, making them denser than before. (1.4)
10. A *Luminous* means *light–emitting* in this context. Clues: *...glow...; ...stars...*; the stem *–lum–* = light. (1.4)

QUIZ 4 (p. 84)

1. D The referent of *those* is something in Great Britain and Ireland that automobile sales in Michigan outnumbered. Logic tells you that *those* refers to *automobile sales*. (1.3)
2. B *The lifeblood* means *an important part* in this context. Clues: *The growth of roads and the automobile industry made cars ----- of the petroleum industry...; The automobile caused expansions in....* (1.4)
3. A *Frenzied* means *intense* in this context. Clues: *...automobile industry reached new heights...; ...new roads...; ...road building...; ...largest public works program in history.* (1.4)
4. C Clues: *After 1945...new roads led out of the city to the suburbs...; The result was a network of federally subsidized highways connecting major urban centers.* (1.1)
5. B *Scant* means *barely sufficient* in this context. Clues: *...75 percent of federal funds for transportation were spent on highways, while a ----- one percent went to buses, trains, or subways; ...worst public transit system. While* shows contrast between *75 percent* for highways and *one percent* for public transit. (1.4)
6. C The passage does not state that the growth in the number of cars had a positive impact on subway systems; in fact, there was a negative impact on subways and other forms of public transit. All the other answers are given as positive impacts: *The automobile caused expansions in outdoor recreation, tourism...service stations...; ...two–car families transported children to...shopping malls.* (1.2)
7. A Clues: *...the American bias was clear, which is why the United States has the world's best road system and nearly its worst public transit system.* (1.1)
8. C *Range* means *variety* in this context. Clues: *Some species are restricted to a single song...while other species have a ----- of songs and dialects.... While* shows contrast between *single song* and *range*. (1.4)
9. D Clues: *For all bird species, there is a prescribed path to development of the final song...; This process is similar to the steps through which young children pass as they first babble and then mimic pieces of the songs they hear....* (1.1)
10. A *Mimic* means *imitate* in this context. Clues: *The most important auditory stimuli for birds are the sounds of other birds...; This process is similar to...young children...as they first babble and then ----- pieces of the songs they hear around them....* (1.4)
11. D Clues: *...compared to the human larynx, which uses only about two percent of exhaled air, the syrinx is a far more efficient sound–producing mechanism that can create sound from nearly all the air passing through it.* (1.1)

12. B Clues: *Song is a complex activity that young birds must learn, and learning implies that higher–brain activity must be complex in the control of song.* (1.1)
13. A *Lateralized* means *linked to a specific area of the brain*. Clues: *...the song–control centers are located in the left side of the avian brain.* (1.4)
14. D The referent of *there* is someplace where a lesion will destroy bird song. The previous sentence states that the song–control centers are located in the left side of the avian brain. Logic tells you that *there* refers to *the left side of the brain*. (1.3)
15. B The passage does not state that birds are born with the full ability to sing their species song; in fact, birds must learn the species song. All the other answers are given: *The most important auditory stimuli for birds are the sounds of other birds...; Underlying all avian vocal activity is the syrinx, an organ...linked to the brain; Possibly the most interesting aspect of bird song...is its foundation in the central nervous system.* (1.2)
16. A Clues: *Machiavelli was a product of Renaissance Florence, a city–state that was struggling for expansion and survival among a competing group of similar states; Machiavelli came to understand power politics by observing the spectacle around him....* (1.1)
17. B *Illusions* means *false beliefs* in this context. Clues: *...came to understand power politics by observing the spectacle around him without any* -----; the prefix *il–* = not; the stem *–lus–* = light. (1.4)
18. C Clues: *In his most famous work, The Prince (1532), Machiavelli described the means by which a leader may gain and maintain power.* (1.1)
19. C The referent of *their* is someone or something with weaknesses that the ideal prince can exploit. The sentence states that the ideal prince studied his fellow men. Logic tells you that *their* refers to *fellow men*. (1.3)
20. A *Pessimistic* means *negative* in this context. Clues: *...all men were brutal, selfish, and cowardly...; ...thought that his own time was too corrupt...; Machiavelli's philosophy arose more from a deeply* ----- *view of human nature....* (1.4)
21. C Machiavelli's political philosophy did not include the belief that people must organize to fight against evil and corruption in politics. All the other answers are given: *Politics was simply the battle of men in search of power, and since all men were brutal, selfish...; The ideal prince was the man who had studied his fellow men...and was willing to exploit their weaknesses; Machiavelli saw politics as an affair separate from religion and ethics, an activity to be practiced and studied for its own sake.* (1.2)
22. D Clues: *He was, and still is, misunderstood to have promoted...criminality over other means of governing.* (1.1)
23. B *Lucidity* means *clarity* in this context. Clues: *...saw the world more clearly than others...; ...honesty*; the stem *–luc–* = light. (1.4)
24. A *Monologues* means *speeches* in this context. Clues: *...to comment on his own wickedness...*; the prefix *mono–* = one; the stem *–log–* = study. *Comment* indicates speaking; a monologue is a speech by one person. (1.4)
25. D Complex motivation is not a characteristic of the Machiavel character. All the other answers are given: *...contempt for goodness; The Machiavel had a habit of using humorous monologues to comment on his own wickedness...; ...delight in evil...* (1.2)

EXERCISE 1.5.A (p. 94)

1. B You can infer that people have long been aware of links between music and mathematics. Clues: *In classical and medieval times, the study of music shared many features with the discipline of mathematics....*
2. A You can infer that corvids are a family of birds. Clues: *...stay in their flocks all year round; ...synchronized flight test; ...adaptability and intelligence of this family....*
3. C You can infer that the author believes trees, plants, and organic matter can store solar energy. Clues: *Major indirect forms of solar energy include... biomass—solar energy converted to chemical energy in trees, plants, and other organic matter.*
4. C You can infer that women did not acquire property through inheritance. Clues: *The family members who would not inherit a share in the property were exploited by the laws of inheritance. The system was particularly hard on women, who usually did not share in the ownership of the farm....*
5. B *Embark on* means *begin* in this context. Clues: *When the family's first child is born, the parents* ----- *a sequence of experiences....* (1.4)
6. D You can infer that the family life cycle shapes several years in the lives of most adults. Clues: *...from infancy and toddlerhood...and eventually, to departure from the nest. Each of these periods in the child's life makes a different set of demands on the parents.*
7. B You can infer that aromatherapy is the use of certain scents to promote health. Clues: *...odors and fragrances affect the body and mind and are capable of healing anxiety, stress, and other sources of disease; Some popular essential oils and their uses in aromatherapy include....*
8. B The passage does not state that jasmine is believed to reduce stress. All the other answers are believed to reduce stress: *...lavender and chamomile, which are reputed to ease stress...; Orange eases anxiety....* (1.2)
9. D You can infer that social interactions related to teaching and learning provide evidence that orangutans have culture. Clues: *Some orangutan parents teach their young...while others demonstrate the technique...; Such social interactions lead researchers to conclude that if orangutans have culture....*
10. C You can infer that primate culture may be older than scientists used to believe. Clues: *The discovery of orangutan culture suggests that early primates... might have developed the ability to invent new behaviors...approximately 6 million years earlier than once believed.*

EXERCISE 1.5.B (p. 98)

1. A You can infer that the sources of immigrants shifted to different parts of Europe. Clues: *In the early nineteenth century, most of the Europeans who immigrated to the United States were from northern and western European countries...; However, most of the fifteen million Europeans arriving between 1890 and 1914 came from southern and eastern Europe....*
2. C You can infer that the Doukhobors mainly settled in the Canadian prairies. Clues: *The Doukhobors... established communal settlements in Saskatchewan. Together with other immigrants, they arrived in such numbers that...the population of the prairies had increased....*
3. B You can infer that David Smith's childhood exposed him to the uses and possibilities of iron. Clues: *His iron sculptures flowed naturally out of the mechanized heart of America, a landscape of railroads and factories. As a child, Smith played on trains and around factories....*
4. A The referent of *several* is something that has "heads" or "legs." The subject of the previous sentence is *sculptures*. Logic tells you that *several* refers to *sculptures*. (1.3)
5. D You can infer that the *Sentinels* and the *Cubis* each consist of a number of pieces placed in outdoor settings. Clues: *...two series of sculptures...the Sentinels...and the Cubis...; He also began placing his sculptures outdoors...; In the late afternoon sun, the steel planes of the Cubis reflect a golden color....*
6. C You can infer that the author believes David Smith's pieces capture the power of industry and the beauty of natural light. Clues: *To Smith, iron spoke of the power, mobility, and vigor of the industrial age; He also began placing his sculptures outdoors, in natural light, where the highly reflective stainless steel could bring sunlight and color into the work.*
7. A You can infer that an earned run average is a statistic. Clues: *Baseball fans love statistics; Fans really understand...an earned run average—all those basics....*
8. B You can infer that hitting with runners in scoring position is a complex statistic. Clues: *...many new statistics have evolved: hitting with runners in scoring position...; These are the so-called sophisticated statistics.*
9. D You can infer that Ty Cobb and Mickey Cochran were great baseball players. Clues: *One "game" is to compare the players of old with the players of today; "Could...have played with Ty Cobb or Mickey Cochran...?"; What they have to argue with is statistics; The statistics are all that remain of the career of that star player of the past.*
10. B You can infer that the author believes baseball provides a fascinating way to look at statistics. Clues: *There is absolutely no doubt about it: baseball is the greatest statistics game there is; There is a whole lore of baseball history involving statistics.*

EXERCISE 1.5.C (p. 101)

1. B You can infer that the organs for hearing and balance both send nerve impulses to the brain. Clues: *Both organs involve fluid–filled channels containing hair cells that produce electrochemical impulses...; To perform the function of hearing, the ear converts the energy of pressure waves moving through the air into nerve impulses that the brain perceives as sound; When the position of the head changes...the force on the hair cells changes its output of nerve impulses. The brain then interprets these changes....*
2. A Hearing does not involve motion of the vocal cords so that they vibrate; this is an aspect of speaking, not hearing. All the other answers are given as part of hearing: *...fluid–filled channels containing hair cells that produce electrochemical impulses when the hairs are stimulated...; ...bones of the middle ear amplify and transmit the vibrations...; the ear converts the energy of pressure waves moving through the air into nerve impulses....* (1.2)
3. D You can infer that the cochlea is a part of the inner ear. Clues: *The inner ear is a network of channels containing fluid...; ...the cochlea, the organ of hearing; ...the fluid inside the cochlea. Hair cells in the cochlea convert the energy of the vibrating fluid....*
4. A You can infer that gravity has an essential role in the sense of balance. Clues: *Hair cells in the inner ear respond to changes in head position with respect to gravity and movement. Gravity is always pulling down on the hairs, sending a constant series of impulses to the brain.*
5. C The referent of *These extraordinary crafts* is something that was fashioned from a single tree trunk and carried as many as forty people. The previous sentence introduces the topic of seagoing dugout canoes. Logic tells you that *These extraordinary crafts* refers to *seagoing dugout canoes*. (1.3)
6. A Clues: *...keeping the sections below the waterline thickest and heaviest to help keep the canoe upright in stormy seas.* (1.1)
7. D You can infer that canoes were important cultural artifacts of the Haida. Clues: *The canoes were often painted with elaborate designs of cultural significance to the tribe.*
8. B *Staunch* means *strong* in this context. Clues: *...the canoe's stability...; ...sturdy wooden thwarts...; ...utility....* (1.4)
9. D You can infer that trees provided essential tools for obtaining food. Clues: *...harpoons of yew wood, baited hooks of red cedar, and lines of twisted and braided bark fibers, they fished...and hunted....*
10. C You can infer that Haida canoes were of great value in the regional economy. Clues: *...neighboring tribes were willing to exchange quantities of hides, meats, and oils for a Haida canoe. These graceful vessels became the tribe's chief item of export.*

EXERCISE 1.6.A (p. 108)

1. A The author's purpose is to point out that financial measurements are not always precise. Clues: *In economics and finance, nothing can be measured with the precision...; ...approximate measurement is often sufficient....*

2. D The author's purpose is to warn potential buyers of the possibility of accounting abuses. Clues: *Accounting scandals occur...; Although the accounting profession and government agencies have attempted to reform some of these abuses....*
3. B The author's purpose is to provide biographical information about the author. Clues: *...Stephen Leacock's masterpiece, Sunshine Sketches of a Little Town...; ...one of the founders of Canadian literature....*
4. A The author's purpose is to describe the tone of the book. Clues: *...a portrait of small-town Canadian life in the early twentieth century; ...a past to be cherished, a pastoral and idyllic town....*
5. C The author's purpose is to illustrate the behavior required of certain social roles. Clues: *...certain types of behavior from people who play certain social roles; Anyone occupying a given position is expected to adopt a specific attitude.*
6. D The author's purpose is to emphasize the value of informal roles to a group. Clues: *...a group's health and happiness....*
7. C Clues: *...the family historian...relays valuable cultural information that maintains both the family and the larger society.* (1.1)
8. C The author's purpose is to compare how various surfaces transfer heat into the atmosphere. Clues: *Thus, the different types of surfaces transfer heat into the atmosphere at different rates.*
9. A Clues: *...we depend on our perceptions of the data...; Human perception must be included if our understanding of climatic processes is to be translated into societal actions.* (1.1)
10. C The author's purpose is to give examples of dangerous effects of climate. Clues: *...the harmful effects of climate—....*

EXERCISE 1.6.B (p. 112)

1. A The author's purpose is to emphasize his contributions to the field. Clues: *...promoting forestry as a profession. Foremost was Gifford Pinchot...; ...chief of the Forest Service...; ...professor of forestry and founder of the Pinchot School of Forestry....*
2. D The author's purpose is to introduce the types of work done by professional foresters. Clues: *...plan and supervise the growth, protection, and utilization of trees; ...make maps of forest areas...manage timber sales; ...protect the trees...; ...may be responsible for other duties...; ...do research, provide information...teach in colleges and universities.*
3. B The passage does not mention how to select a good school of forestry. All the other answers are mentioned: *Some foresters may be responsible for other duties, ranging from...; Several men have been responsible for promoting forestry as a profession; ...estimate the amount of standing timber and future growth, and manage timber sales.* (1.2)
4. B The passage does not state that fashions serve the purpose of signaling a change in personal beliefs. All the other answers are given: *By keeping up with fashions...members of a group both satisfy their desire for novelty...; ...demonstrating their membership in the group; ...obey the rules....* (1.2)
5. D The author's purpose is to explain how high status may involve an inverted status display. Clues: *Some people...consider themselves of such high status that they do not need to display it with their clothing; ...an inverted status display is most likely to occur where the person's high status....*
6. A The author's purpose is to give an example of an item that conveys one's actual status. *Clues: ...a subtle but important signal, such as an expensive -----, will prevail over the message of the casual dress.*
7. A The author's purpose is to show how the war for independence affected the economy. Clues: *The war for independence from Britain was a long and economically costly conflict.*
8. C Clues: *The most serious consequences were felt in the cities, whose existence depended on commercial activity.* (1.1)
9. C The author's purpose is to emphasize the great short-term cost of the war for New York. Clues: *The population...declined from 21,000 in 1774 to less than half that number only nine years later in 1783.*
10. D You can infer that shortages of money and manufactured goods occurred during the years right after the war for independence. Clues: *...the loss of established markets for manufactured goods...the loss of sources of credit...the lack of new investment all created a period of economic stagnation that lasted for the next twenty years.* (1.5)

QUIZ 5 (p. 116)

1. B The author's purpose is to identify the freezing point of water. Clues: *Because many foods contain large amounts of water, they freeze solidly at or just below....* (1.6)
2. B The author's purpose is to warn that not blanching will harm the food's nutritional value. Clues: *...avoid this step...; The result would be a product largely devoid of vitamins and minerals.* (1.6)
3. A You can infer that enzyme action in vegetables eventually causes vegetables to spoil. Clues: *...enzyme action, which vegetables require during their growth and ripening but which continues after maturation and will lead to decay....* (1.5)
4. C You can infer that underblanched vegetables would lack vitamins and minerals. Clues: *...to avoid this step would be an expensive mistake. The result would be a product largely devoid of vitamins and minerals; Underblanching is like no blanching at all....* (1.5)
5. D You can infer that the French colonies had fewer people than did other North American colonies. Clues: *...there were never enough French settlers to make French North America a large center of population.* (1.5)
6. A The author's purpose is to emphasize the competition among European groups. Clues: *...the lead...; ... early losses....* (1.6)
7. B You can infer that England was a leading European power. Clues: *England's commercial and political growth at home soon gave it the lead in the colonial race....* (1.5)

8. D The author's purpose is to illustrate England's growing power in North America. Clues: *England's commercial and political growth at home soon gave it the lead in the colonial race...; ...there were 2,000 in the English colonies; ...the English had absorbed the Dutch colonies; ...the English colonies had a quarter of a million.* (1.6)
9. C You can infer that the Dutch and the English competed for land, and the English prevailed. Clues: *The Dutch settlements suffered a lot of competition from the English, and eventually, the Dutch governor was forced to surrender all Dutch lands to the English; ...the English had absorbed the Dutch colonies.* (1.5)
10. B Clues: *The conflicts...were mostly over commercial interests and signaled the intense rivalry for control of North American land and resources.* (1.1)

QUIZ 6 (p. 119)

1. D The name is curious because it did not originate in America. Clues: *The name was, in fact, a historical accident, originating with fashionable architects in Victorian England who coined it....* (1.6)
2. B The referent of *it* is something that was coined by fashionable architects in Victorian England. The subject of the sentence is *name*. Logic tells you that *it* refers to *name*. (1.3)
3. D *Asymmetrical* means *unbalanced* in this context. Clues: *...how drastically different the right and left sides are....* (1.4)
4. A The passage does not mention decorative windows as a characteristic of Queen Anne houses. All the other answers are mentioned: *...the wood shingle siding...; ...the inviting wraparound porch...; ...the unusual roof shape—a steeply pitched....* (1.2)
5. C You can infer that the Queen Anne style was elaborate and ornate. Clues: *...unusual roof shape...; ...the detailing, shown in the wood shingle siding cut into fanciful decorative patterns of scallops, curves, diamonds, or triangles.* (1.5)
6. C Clues: *Queen Anne houses faded from fashion early in the twentieth century as the public's taste shifted toward the more modern Prairie and Craftsman style houses.* (1.1)
7. A *Buffs* means *experts* in this context. Clues: *...painstakingly and lovingly restored...; ...reproduced by builders who give faithful attention to the distinctive shapes and detailing....* (1.4)
8. C The referent of *that* is something connected with sports and games. The subject of the sentence is *type of commentary*. Logic tells you that *that* refers to *commentary*. (1.3)
9. D Clues: *..."color" commentary provides the audience with pre–event background, during–event interpretation, and post–event evaluation.* (1.1)
10. B Clues: *Play–by–play commentary...is unlike other kinds of narrative, which are typically reported in past tense. Play–by–play commentary is reported in present tense.* (1.1)
11. A The author's purpose is to describe the uniqueness of radio play–by–play. Clues: *It is these characteristics that make this kind of commentary unlike any other type of speech situation.* (1.6)
12. A "He pitched for Chicago" is not an example of play–by–play commentary; rather, it is an example of background information that is part of color commentary. All the other answers are examples of play–by–play commentary: "Junior out of bounds" eliminates the verb; "Straight away it's Owens" has inverted word order and is spoken in present tense; "He can't make the shot" is spoken in present tense. (1.2)
13. D *Pace* means *speed* in this context. Clues: *...very fluent, keeping up with the ----- of the action. The rate is steady....* (1.4)
14. B *Crucial* means *important* in this context. Clues: *...informing the listener...; ..."state of play" summary...; ...for listeners or viewers who have just tuned in.* (1.4)
15. C You can infer that the author believes commentary enhances the excitement and enjoyment of sports. Clues: *"Play–by–play" commentary narrates the sports event, while "color–adding" or "color" commentary provides the audience with...background...interpretation...evaluation; Play–by–play commentary is very fluent, keeping up with the pace of the action.* (1.5)
16. B Clues: *...the circulatory system, consisting of two cellular pipelines...; One pipeline, called the xylem...; The other, the phloem....* (1.1)
17. C The referent of *This* is something that is the tree's major growth organ. The subject of the previous sentence is *vascular cambium*. Logic tells you that *This* refers to *vascular cambium*. (1.3)
18. B You can infer that the xylem is located inside the phloem and the vascular cambium. Clues: *...the vascular cambium produces new phloem cells on its outer surface and new xylem cells on its inner surface.* (1.5)
19. A You can infer that xylem sap is composed mainly of water. Clues: *Xylem cells in the roots draw water molecules into the tree...; The xylem pipeline transports this life–sustaining mixture upward as xylem sap...; ...bringing xylem sap to thirsty cells. Leaves depend on this delivery system for their water supply....* (1.5)
20. D *Wilt* means *sag* in this context. Clues: *Unless the transpired water is replaced...the leaves will ----- and eventually die.* The leaves will sag and die because they have lost water. (1.4)
21. C Clues: *Water moves through the tree because it is driven by negative pressure—tension...; Transpiration, the evaporation of water from leaves, creates the tension that drives long–distance transport up through the xylem pipeline.* (1.1)
22. B *Adhere to* means *stick to* in this context. Clues: *...cohesion of water due to hydrogen bonding...; ...water molecules ----- each other and are pulled upward...*; the prefix *ad–* = to, toward. (1.4)
23. A *Gummy* means *sticky* in this context. Clues: *...become clogged...; ...can no longer transport fluids... Gummy* is the adjective form of *gum*, a sticky substance. (1.4)
24. C The author's purpose is to compare what happens in two aging circulatory systems. Clues: *Over time the innermost xylem cells become clogged with hard or gummy waste products and can no longer transport fluids. A similar situation occurs in the clogging of ----.* (1.6)

25. A Transporting food from the leaves to the trunk is not a function of the xylem; it is a function of the phloem. All the other answers are functions of the xylem: *Xylem cells in the roots draw water molecules into the tree...carrying chemical nutrients from the soil; ...the dead xylem cells become part of the central column of heartwood, the supportive structure of the tree; ...Within the xylem cells, water molecules...are pulled upward through the trunk.* (1.2)

EXERCISE 1.7.A (p. 128)

1. D *Some general preparation may be in order* is paraphrased in *As general preparation. Participants may want to take into the conference materials or data that might be useful if a matter comes up* is paraphrased in *participants can bring materials or data that might be a part of the discussion.*
2. A *This* in the highlighted sentence refers to the fact that *ectotherms heat directly with solar energy*, stated in the previous sentence. *A reptile can survive on less than 10 percent of the calories required by a mammal of equivalent size* is paraphrased in *it requires less than 10 percent of the calories that a mammal of the same size needs.*
3. C *Sometimes the designer disregards the context* is paraphrased in *they ignore them. The assumption that surrounding structures will later be replaced* is paraphrased in *Architects often believe that nearby structures will not always be there.*
4. B *They* in the highlighted sentence refers to *folkways* in the previous sentence. *Provided evidence of the everyday life of the people* is paraphrased in *give us a much better description of daily life. Far richer than that in most other historical texts* is paraphrased in *much better...than most histories do.*
5. D *The ruminant periodically returns the cud to its mouth* is paraphrased in *The cud is sent back to the ruminant's mouth. Chewed at length* is paraphrased in *chewed extensively. To crush the fibers, making them more accessible to further bacterial action* is paraphrased in *so that the fibers can be digested more easily.*
6. B *Not restricted to city dwellers* is paraphrased in *not just people who live in cities. It can be considered a trait of all modern societies at a high level of technological development* is paraphrased in *Urbanism characterizes all highly developed societies.*
7. C *Humans drove alligators to near extinction* is paraphrased in *People almost destroyed the native alligator population. Many of their marsh and swamp habitats in North America* is paraphrased in *many North American environments.*
8. A *It is still protected from excessive harvesting by hunters* is paraphrased in *Alligators are still protected. Limited hunting is allowed* is paraphrased in *hunters are allowed to kill a certain number. To keep the population from growing too large* is paraphrased in *to control their population.*
9. D *Current archaeological theory holds* is paraphrased in *Archaeologists believe. The first humans in the Americas were bands of advanced Stone Age people* is paraphrased in *groups of Stone Age humans first came to the Americas. Crossed over from what is now Siberia in Asia sometime between 12 and 30 thousand years ago* is paraphrased in *came to the Americas from Asia about 12 to 30 thousand years ago.*
10. C *In South America, where the glaciers from the ice age melted first* is paraphrased in *The ice age glaciers melted earliest in South America. The migrants took strong root* is paraphrased in *the migrants settled. The fertile soil and warm climate of Patagonia* is paraphrased in *the warm, fertile region of Patagonia.*

EXERCISE 1.7.B (p. 133)

1. D *Whenever these differences lead to exclusion or discrimination* is paraphrased in *when these people face discrimination. Subcultures develop as a shield to protect members from the negative attitudes of others* is paraphrased in *Subcultures form to protect people who differ from the majority.*
2. A A desire to join the dominant culture is not given as a characteristic of subcultures. All the other answers are given: *...differ from the mainstream...; ...own special language and customs; ...a "we" feeling among members....* (1.2)
3. C *These variations are close enough for the subgroup to remain under the societal umbrella* is paraphrased in *A subculture's values...resemble the majority's values enough to keep the subgroup within the larger society. Different enough to reflect the unique experience of subgroup members* is paraphrased in *A subculture's values show its separateness.*
4. B *Each hemisphere has four discrete lobes* is paraphrased in *The brain's two hemispheres each have four separate parts. Researchers have identified a number of functional areas within each lobe* is paraphrased in *each part controls several functions.*
5. C Clues: *Without the corpus callosum to function as a switchboard...; The link between sensory input and spoken response was disconnected.* (1.1)
6. A *Without the corpus callosum to function as a switchboard between the two sides of the brain* is paraphrased in *because the corpus callosum did not provide the link. The subject's knowledge of the size, texture, and function of the key* is paraphrased in *Information about the key. Could not be transferred from the right to the left hemisphere* is paraphrased in *could not travel from one side of the brain to the other.*
7. B *The microorganisms secrete enzymes* is paraphrased in *microorganisms produce certain enzymes. Break down the cells of the dead vegetation and animal matter* is paraphrased in *Nonliving plant and animal matter is digested.*
8. D *Cements* means *combines* in this context. Clues: *...the glue that ----- the soil particles into larger, coarser grains.* (1.4)
9. B You can infer that organic compost relies on the digestive processes of microorganisms. Clues: *The microorganisms secrete enzymes that break down the cells...; This partially digested mixture is compost.* (1.5)

10. A *The terms "compost" and "humus" are often used interchangeably* is paraphrased in *people sometimes confuse the two words. They are not synonymous* is paraphrased in *Compost and humus are different substances.*

EXERCISE 1.8.A (p. 141)

1. A In the added sentence, *Most of them* refers to *Kindergartners*, the subject of the previous sentence. The added sentence introduces the idea of talking in front of a group, which the next sentence develops with the example of "sharing time."
2. B In the added sentence, *However* is a transition that shows contrast between *appear relatively dry* in the previous sentence and *spongy and wet to the touch* in the added sentence.
3. C In the added sentence, *narrower leaves of trees like willows and mimosa* logically follows *broad leaves of deciduous trees like oaks and maples* in the previous sentence.
4. D In the added sentence, *This* refers to the oboe's rasping, "sawtooth" sound, mentioned in the previous sentence. The added sentence gives the reason for this sound.
5. C In the added sentence, *It* refers to *Carbonizing*, the subject of the previous sentence. Also, *method* in the added sentence restates *technique* in the previous sentence. The added sentence gives additional information about carbonizing.
6. D The added sentence further develops the idea that *no one can find another trade to improve his situation*, mentioned in the previous sentence.
7. C The added sentence discusses the study mentioned in the previous sentence. The added sentence introduces the idea of bright and dark colors, which the next sentence develops with specific examples.
8. A In the added sentence, *This irritation* refers to *an inflammation of the bronchial tubes* in the previous sentence.
9. D The added sentence gives examples of courses in the *curriculum from a variety of ethnic sources* mentioned in the previous sentence.
10. B The added sentence gives another example of two types of oceanographers, *biological and chemical oceanographers*, that logically follows *physical oceanographers and ocean engineers* given in the previous sentence.

EXERCISE 1.8.B (p. 144)

1. C *Flourished* means *lived* in this context. Clues: *Their mound construction was especially intensive in this area; ...evidence...; ...five hundred years.* (1.4)
2. B The referent of *They* is something that includes shell beads, bear and shark teeth, and other items. The subject of the previous sentence is *artifacts*. Logic tells you that *They* refers to *artifacts*. (1.3)
3. C The added sentence introduces the idea that objects found in particular mounds indicate the status and occupation of the deceased. The next sentence develops this idea with a description of the *pipes found in one mound* that probably belonged *to a chief or priest*.
4. B You can infer that a 60–centimeter fish can swim faster than a 30–centimeter fish. Clues: *Generally speaking, the larger the fish the faster it can swim.* (1.5)
5. D *Thrust is used to propel the fish forward* is paraphrased in *Thrust pushes the fish forward. Lateral force tends to make the fish's head deviate from the course in the same direction as the tail* is paraphrased in *lateral force pushes both its head and its tail to the same side.* (1.7)
6. B The added sentence further describes the undulations mentioned in the previous sentence. The added sentence introduces the idea of the bending of the body, which the next sentence develops with more details.
7. C The referent of *another* is something for which there is more than one type. The sentence discusses coins. Logic tells you that *another* refers to *type of coin.* (1.3)
8. D In the added sentence, *However* is a transition that shows contrast between *traders worked out different rates of exchange* in the previous sentence and *this was a long, slow process* in the added sentence. In the added sentence, *this* refers to *rates of exchange* in the previous sentence.
9. B *The wealthier classes used money for major transactions* is paraphrased in *Rich people used money for important purchases. Ordinary people continued to barter for most things in their daily lives* is paraphrased in *common people traded goods and services directly.* (1.7)
10. A The added sentence introduces the topic of paper money, which the rest of the paragraph develops with facts and details.

QUIZ 7 (p. 149)

1. C *In evolutionary history, the development of language* is paraphrased in *The emergence of language. Set humans apart from the rest of the animal kingdom* is paraphrased in *distinguished early humans from other animals.* (1.7)
2. A The added sentence introduces the topic of written language, which the rest of the paragraph develops with facts and details. (1.8)
3. D *The expansion of humanity from an oral society to one that also used the written word for communication* is paraphrased in *writing was added to speaking as a form of communication. A defining point in human civilization* is paraphrased in *An important development in human history.* (1.7)
4. B *It is one of the most important sensations* is paraphrased in *The ability to sense pain is extremely important. Because it is translated into a negative reaction, such as withdrawal from danger* is paraphrased in *because pain signals the body to respond to a threat.* (1.7)
5. A In the added sentence, *They* refers to *Pain receptors*, the subject of the previous sentence. In the added sentence, *such as* is a transition that introduces examples of *a variety of stimuli*, mentioned in the previous sentence. (1.8)
6. D In the added sentence, *Thus* is a transition that shows result by linking the idea of *decreasing the perception of pain* in the previous sentence with *natural painkillers* in the added sentence. In the added sentence, *they* refers to *peptides*, the subject of the previous sentence. (1.8)

7. B *Prestige is a valued resource for people at all levels of a society* is paraphrased in *People at all social levels value prestige. This can be seen among inner-city youth* is paraphrased in *for example, among urban youth. To disrespect or "diss" someone has negative consequences* is paraphrased in *to disrespect another is punished.* (1.7)
8. D The added sentence gives the examples of *wisdom, old age, warriors,* and *youth,* which illustrate qualities that are respected in different societies, an idea mentioned in the previous sentence. (1.8)
9. C *Prestige is linked to income, but there are exceptions* is paraphrased in *an exception to the rule that prestige and income are related. College professors, who have high prestige but relatively low salaries compared to physicians and lawyers* is paraphrased in *college professors have high prestige but relatively low incomes.* (1.7)
10. A The added sentence introduces the topic of occupational status, which the rest of the paragraph develops with facts and examples. (1.8)

QUIZ 8 (p. 154)

1. B *Palisades* means *fences* in this context. Clues: *...fortified villages...; ...easy to defend...; Twenty-foot ----- surrounded a group of longhouses and acted as a defensive wall....* (1.4)
2. D The author's purpose is to show that villages varied in population. Clues: *A number of families were housed within each longhouse, which varied in size...; ...huge multiple family structures...; In the more populous villages....* (1.6)
3. D *The longhouse was more than just a shelter* is paraphrased in *The longhouse not only provided housing. The basic unit upon which the entire society was constructed* is paraphrased in *the foundation of the whole society.* (1.7)
4. C Clues: *In building the longhouse, a row of forked wooden poles...; Cross poles were lashed to the forked uprights to form an arched roof; Slender poles or rafters were then secured to the roof frame....* (1.1)
5. A The referent of *dwelling* is something that was compartmentalized (divided into parts) to accommodate each family. The paragraph discusses the longhouse. Logic tells you that *dwelling* refers to *longhouse.* (1.3)
6. A The passage does not state that each longhouse was a separate village. All the other answers are given: *Two families shared the stone-lined hearth... Corn, dried fish, and other foods hung from overhead; A number of families were housed within each longhouse...; ...carved images of clan symbols represented the families living there.* (1.2)
7. C The added sentence gives examples of trees that were sources of bark, which the previous sentence mentions. (1.8)
8. B You can infer that the Harlem Renaissance is the name of a literary movement. Clues: *...African American writers...; ...poetry and storytelling...; ...written form....* (1.5)
9. D *Prolific* means *productive* in this context. Clues: *...literary career...; ...his first book; ...his poetry, plays, screenplays, novels, and short stories*; the prefix *pro-* = forward. (1.4)
10. C Clues: *...the incorporation of the rhythms of black music into his poetry...; ...a collection of poems on African American themes set to rhythms from jazz and blues.* (1.1)
11. A The passage does not state that Langston Hughes taught university courses. All the other answers are given: *His first novel...screenplays...novels...; ...founded African American theaters...; ...The Weary Blues, a collection of poems on African American themes set to rhythms from jazz and blues.* (1.2)
12. A *Sham* means *falsehood* in this context. Clues: *...a wise fool, an honest man who saw through ----- and spoke plainly.* (1.4)
13. D The referent of *those* is something of a younger generation of black poets that overshadowed Hughes's writings. Logic tells you that *those* refers to *writings.* (1.3)
14. B *His poetry and stories remain an enduring legacy of the Harlem Renaissance* is paraphrased in *his writings represent the accomplishments of the Harlem Renaissance. His position in the American canon is secure* is paraphrased in *Hughes attained prominence in American literature.* (1.7)
15. D In the added sentence, *this book* refers to *The Weary Blues* in the previous sentence. (1.8)
16. C The author's purpose is to clarify the distinctions between the two terms. Clues: *...often used interchangeably, but there are actually differences between them. One difference is....* (1.6)
17. D *Submerged* means *underwater* in this context. Clues: *...every part of it is sometimes underwater; ...extends seaward to the edge of the continental shelf...; ...extends down into deep water*; the prefix *sub-* = under. (1.4)
18. B The passage does not state that a coast extends to the continental shelf and a shore extends inland to a highland. All the other answers accurately describe coasts and shores: *A shore is the zone at the edge of an ocean, lake, or river...A coast is the land just inland from the shore...; ..."coast" applies only to oceans, but "shore" can apply to other bodies of water as well; A coast is...beyond the usual reach of high water; The shore is the area between the high-water mark and the low-water mark, and thus every part of it is sometimes underwater.* (1.2)
19. C Clues: *Many coasts are sea bottoms uplifted by earthquakes to become dry land, so they may show some features of shores....* (1.1)
20. A You can infer that the Oregon coast is relatively straight. Clues: *If the grain is mostly parallel to the coast, as along the Oregon coast, the mouths of few rivers will indent the coastline...; Such coastlines...are likely to be smooth, straight, or gently curving.* (1.5)
21. A Clues: *The direction of the structural "grain" of the coastal rock affects the shape of the coastline; If the grain is mostly parallel to the coast...called Pacific type...; ...if the grain of the rock is at an angle to the coast...Atlantic type.* (1.1)

22. C *These forces* in the highlighted sentence refers to *tides, waves, and currents* in the previous sentence. *These forces erode rocky shores* is paraphrased in *Tides, waves, and currents wear away shores. Transport sand and debris from place to place, depleting some beaches* is paraphrased in *wear away shores in some places. Building up others* is paraphrased in *deposit sand and rock elsewhere along the shore.* (1.7)
23. D The referent of *them* is something weakened by waves crashing against sea cliffs during storms. Logic tells you that *them* refers to *cliffs*. (1.3)
24. B *Batter* means *strike* in this context. Clues: *...waves crash against sea cliffs...; Storm waves ----- beaches and...rush beyond them....* (1.4)
25. A The added sentence introduces the idea of the straightness or irregularity of coastlines, which the rest of the paragraph develops with facts and description. (1.8)

EXERCISE 1.9.A (p. 164)

1–2. A, C, F Key information: *Homer was a master of watercolor...understood and exploited the requirements of watercolor...the recording of immediate experience; ...Homer's watercolors of the Adirondack woods...are demonstrations of masterful completeness; In one particular Adirondack painting...all elements come together with perfect unity.* Answers (B) and (D) are not mentioned; answer (E) is a minor idea.

3–4. B, E, F Key information: *The debris transported by a glacier is produced either by erosion of the rock beneath the glacier or by erosion on the slopes rising above the surface of the glacier; ...moraine debris remains unsorted both during its transport and after it has been deposited...; Once the glacial ice has retreated, the moraine deposits are left exposed...The various landforms—moraines....* Answer (A) is not mentioned; answers (C) and (D) are minor ideas.

5–6. B, D, E Key information: *Cultural evolution has occurred in stages...; ...new technology has escalated exponentially, and so has the human impact on the planet; Cultural evolution has enabled us to...shortcut biological evolution. We no longer have to wait to adapt to our environment through natural selection; we simply change the environment to meet our needs.* Answers (A) and (F) are not mentioned; answer (C) is a minor idea.

7–8. A, B, E Key information: *...the central theme of love serves as the trigger for extraordinary adventures...fantastic journeys to exotic lands...; ...and other elements of tragedy...but everything is resolved in the traditional happy ending of comedy; Love is subjected to abnormal strains, often involving separation, jealousy...separation and reunion of loved ones....* Answer (C) is not mentioned; answers (D) and (F) are minor ideas.

9–10. A, C, E Key information: *Humans lose water by evaporation from respiratory and body surfaces and must replenish such losses...; With enough water to drink, the human body can withstand extremely high temperatures...the body's internal environment responds to this change by the evaporative cooling method of sweating; Without water to drink, the body will continue to sweat and lose water...water deficit...collapse occurs...death occurs.* Answers (B) and (D) are minor ideas; answer (F) is not mentioned.

EXERCISE 1.9.B (p. 169)

1. D *Mathematicians are motivated by the belief* is paraphrased in *what motivates mathematicians. They may be able to create a pattern that is entirely new, one that changes forever the way that others think about the mathematical order* is paraphrased in *The idea of establishing a completely new way of understanding mathematics.* (1.7)
2. A Clues: *An extended chain of reasoning may be intuitive...However, even when guided by intuition, they must eventually work out the solution in exact detail if they are to convince others of its validity.* (1.1)
3. C *Insoluble* means *impossible to solve* in this context. Clues: *...finding the solution to a problem that has long been considered -----*; the prefix *in-* = not. (1.4)

4–5. B, C, E Key information: *At the center of mathematical talent lies the ability to recognize significant problems and then to solve them; ...an exceptional ability to manage long chains of reasoning...develop theories from very simple contexts and then apply them to very complex ones; They must demonstrate the solution without any errors or omissions in definition or in line of reasoning... The mathematician must be rigorous....* Answer (A) is a minor idea; answers (D) and (F) are not mentioned.

6. B The author's purpose is to give an example of a very large case of white-collar crime. Clues: *...there are some very large cases of white-collar crime, such as....* (1.6)
7. C *Line one's pockets* means *take money illegally* in this context. Clues: *White-collar crime...; Government employment... also provides opportunities to -----. For example, building inspectors accept bribes and kickbacks....* (1.4)
8. A *It is likely that there are more criminals in the office suites than in the streets* is paraphrased in *White-collar criminals may be more numerous than street criminals. Yet the nature of white-collar crime makes it difficult to uncover the offenses and pursue the offenders* is paraphrased in *but are difficult to catch because the crimes often go unnoticed.* (1.7)

9–10. A, C, F — Key information: *The majority of cases involve low–level employees...Their crimes are usually never discovered because the amounts of money are small...; White–collar crime is not confined to the business sector. Government employment...also provides opportunities...it involves far more money and harm to the public...; ...the nature of white–collar crime makes it difficult to uncover the offenses and pursue the offenders...extremely difficult and expensive to prosecute.* Answers (B) and (E) are minor ideas; answer (D) is not mentioned.

EXERCISE 1.9.C (p. 173)

1. C — The author's purpose is to give examples of groupings that do not represent social behavior. Clues: *...not all aggregations of animals are social; Clusters of moths...or trout gathering...are groupings of animals responding to environmental signals. Social aggregations, on the other hand....* (1.6)
2. B — A group of turtles sunning on a log is not an example of social behavior; it is a grouping of animals responding to an environmental signal. All the other answers illustrate social behavior: *...an individual fighting to defend a territory; Musk oxen that form a passive defensive circle...; ...cooperation in hunting for food....* (1.2)
3. A — *Huddling* means *gathering* in this context. Clues: *...protection from severe weather....* (1.4)

4–5. B, D, E — Key information: *Social behavior includes any interaction that is a consequence of one animal's response to another of its own species...; ...not all social to the same degree...reproduction...defense... cooperation in hunting for food...huddling for protection...transmitting information...; One obvious benefit of social organization is defense...from predators.* Answer (A) is inaccurate; answers (C) and (F) are minor ideas.

6. A — You can infer that the best coffee would come from a mountainous region close to the equator. Clues: *The perfect climate for coffee production exists between the latitudes of 25 degrees north and 25 degrees south of the equator; The best–tasting coffees are grown at between five and eight thousand feet in elevation....* (1.5)
7. B — *Bearing* means *influence* in this context. Clues: *Nitrogen in soil gives rise to...; ...potassium produces...; ...phosphorus, while having no ----- on coffee in the final cup, helps the tree to develop....* (1.4)
8. D — *Caring for the coffee tree* is paraphrased in *the care given to the tree. Critical to the character of the final product* is paraphrased in *The quality of the finished coffee depends on....* (1.7)

9–10. A, D, F — Key information: *The perfect climate for coffee production exists between the latitudes of 25 degrees north and 25 degrees south of the equator...The best–tasting coffees are grown at between five and eight thousand feet in elevation...; ...soil chemistry is carefully watched in commercial operations...soil rich in nitrogen, phosphorus, and potassium... the more balanced the soil, the better the coffee; Caring for the coffee tree is critical...seedlings...require careful replanting...transfer from nursery to plantation is a critical part of the process....* Answers (B) and (E) are minor ideas; answer (C) is not mentioned.

EXERCISE 1.10.A (p. 181)

1–3. B, E — Enlightenment: *...the Enlightenment... dictated that the discipline of formal structure was beneficial to artistic expression; ...human society could reach perfection through rational thought....*

A, C, F — Romanticism: *...celebrated emotions and the senses...Romantic philosophy reveled in the beauty and unpredictable power of Nature; Romanticism found inspiration in death as an "other kingdom" and in the supernatural...; Romanticism believed in democracy and the common people, reviving folk traditions...that made heroes of rural characters.* Answers (D) and (G) are not mentioned.

4–6. A, D, F — Rock floor: *The floor of the river channel lies in the bedrock...; As the stream swings across the valley floor, it deposits material on the insides of the bends in the channel; In a rock–floored valley, the valley slopes are undercut and steepened by the sideways erosion.*

C, G — Accumulation floor: *An accumulation valley floor is created by the continuous deposition of gravel and sand...; Both the channel floor and the floodplain...are composed entirely of these gravel and sand deposits.* Answers (B) and (E) are not mentioned.

7–10. B, F, H — Plants: *...construct organic molecules from inorganic chemicals as plants can during photosynthesis; ...plants store their food as starch; ...two types of tissues that plants do not have. The first is nervous tissue...and the other is muscle tissue.*

A, D, E, I — Animals: *...animals cannot manufacture their own food; Nerves and muscles, which control active behavior, are unique to animals; Animal life began...with the evolution of multi–cellular forms that lived by eating other organisms; Animal cells lack the cell walls....* Answer (C) is not mentioned; answer (G) is inaccurate.

EXERCISE 1.10.B (p. 184)

1–3. B, D — Arcade: *The Arcade's pitched glass roof sheltered a large open space surrounded by tiered shops; ...the entire focus of large commercial blocks....*

C, E, G — Department store: *...an array of goods were organized under a single management; The origins of the department store...in 1829, a new kind of building...featured a four–story rotunda beneath a huge dome...; ...large plate glass display windows...easily lured in the city's wealthy customers.* Answer (A) is inaccurate; answer (F) is not mentioned.

4–6. D, G — Cross–sectional: *...each subject is tested or interviewed only once; ...groups of subjects at different age levels...Cross–sectional studies...can provide information about possible age differences.*

A, E, F — Longitudinal: *...a relatively small group of subjects who are all about the same age at the beginning of the study and then look at them repeatedly over a period of time; One advantage of longitudinal studies is that any changes found are real changes, not just age–group differences; Longitudinal studies...allow us to look at consistency or change within the same individual.* Answers (B) and (C) are not mentioned.

7. B — *These two types of questions* in the highlighted sentence refers to questions about proximate and ultimate causation, which the paragraph discusses. *Very independent approaches to behavior* is paraphrased in *distinct ways of thinking about behavior.* (1.7)

8–10. B, C, G — Proximate: *The biological sciences that address proximate causes...use the experimental method...; The "how" questions seek to understand the proximate or immediate causes... For example, a biologist might want to explain the singing of a male white–throated sparrow in the spring...; ...the proximate or immediate causes underlying a behavior at a particular time and place.*

A, E — Ultimate: *These are "why" questions that focus on ultimate causation, the evolutionary origin and purpose of behavior; Researchers compare characteristics...among related species to identify patterns of variation.* Answers (D) and (F) are not mentioned.

QUIZ 9 (p. 188)

1–2. B, E, F — Key information: *...life expectancy, the average number of years a person can expect to live...rose dramatically, from about 47 years in 1900 to about 76 years in 2000; ...several factors increased life expectancy, most notably improvements in public health...Advances in medical practice...; Large numbers of elderly, many with chronic diseases, become a burden on the health care system and on their families.* Answer (A) is inaccurate; answers (C) and (D) are not mentioned. (1.9)

3–5. C, E, G — Oil paints: *...special manipulative properties of oil colors...smoothly blended tones...; ...the latter remains the standard because the majority of painters find...that in optical quality oil paints surpass all others; ...the principal defect of oil painting is the darkening of the oil over time....*

B, F — Acrylic paints: *Acrylic paints are thinned with water...; ...a painting can be completed in one session that might have taken days in oil because of the drying time required....* Answers (A) and (D) are not mentioned. (1.10)

6–7. A, B, E — Key information: *One major factor determining the uneven patterns of world climates is the variation in the amount of solar energy striking different parts of the earth; ...carrying heat from the equator toward the poles...the warm air becomes cool...cool air masses then flow back toward the equator...This general air circulation pattern...; Two major factors cause seasonal changes in climate. One is the earth's annual orbit around the sun; the other is the earth's daily rotation around its tilted axis....* Answers (C) and (F) are not mentioned; answer (D) is a minor idea. (1.9)

8–10. C, D, F — At the equator: *The large input of heat at and near the equator warms large masses of air; ...near the equator evaporates huge amounts of water from the earth's surface into the troposphere; ...at the equator (zero latitude), where the sun is almost directly overhead....*

A, E — At the poles: *...at the high–latitude poles, where the sun is lower in the sky and strikes the earth at a low angle; At the poles, the warm air becomes cool and falls to the earth.* Answers (B) and (G) are inaccurate for both the equator and the poles. (1.10)

QUIZ 10 (p. 192)

1. A — *Fodder* means *material* in this context. Clues: *Black holes have provided endless imaginative ----- for science fiction writers and endless theoretical ----- for astrophysicists.* (1.4)
2. C — Clues: *Outside the event horizon, gravity is strong but finite, and it is possible for objects to break free of its pull. However, once within the event horizon, an object would need to travel faster than light to escape.* (1.1)
3. B — Clues: *...the exclusion principle—the resistance between the molecular particles within the star as they are compressed....* (1.1)
4. C — *Runaway* means *uncontrolled* in this context. Clues: *With no internal force to stop it, the star will simply continue to collapse in on itself.* (1.4)
5. A — The author's purpose is to illustrate the complete disappearance of a collapsing star. Clues: *The star now disappears from the perceivable universe, like...* (1.6)

What this process leaves behind is a different kind of hole is paraphrased in *The collapse of a star creates a black hole. A profound disturbance in space–time* is paraphrased in *a distortion of space and time. Where gravity is so intense that nothing can escape from it* is paraphrased in *with gravity strong enough to pull in any nearby object.* (1.7)

The passage does not state that astronauts falling into a black hole would travel faster than light. All the other answers are given: *...they would experience acute time distortion...space and time are so warped...; ...would enable them to know, in a few brief seconds, the entire future of the universe; ...intense gravitational forces....* (1.2)

You can infer that the distance between the event horizon and the singularity is related to the size of the black hole. Clues: *The time it takes to reach the singularity from the event horizon...is proportional to the mass of the black hole.* (1.5)

The referent of *this point* is something that would mark the end of time itself. The sentence discusses what would happen once astronauts had reached the singularity. Logic tells you that *this point* refers to *the singularity*. (1.3)

In the added sentence, *A few* refers to *Physicists* in the previous sentence. The added sentence gives another example of what physicists believe would happen to astronauts falling into a black hole. (1.8)

F Key information: *...the formation of a black hole involves the collapse of a large star...the star will simply continue to collapse in on itself...until its entire mass is crushed down to a single point—a point of infinite density and zero volume...; A black hole is very simple in structure: it has a surface—the event horizon—and a center—the singularity. Everything else is gravity; Any object falling within the boundary of a black hole has no choice but to move inward toward the singularity...they would experience acute time distortion...space and time are so warped....* Answer (B) is a minor idea, answer (D) is not mentioned; answer (E) is inaccurate. (1.9)

Truth cannot be separated from experience is paraphrased in *the two are necessarily connected. In order to understand truth, we have to study experience itself* is paraphrased in *We must study experience to know the meaning of truth.* (1.7)

Sequential means *continuous* in this context. Clues: *..."stream" of experience...; ...course of events in our lives*; the stem *–sequ–* = follow. (1.4)

The author's purpose is to describe how thoughts and feelings flow into each other. Clues: *...a stream of thoughts and feelings...; One wave dissolves into another gradually, like the ripples of water in....* (1.6)

16. C The referent of *it* is something that is meaningful and can be associated with something already in the person's mind. The subject of the sentence is *incoming thought*. Logic tells you that *it* refers to *incoming thought*. (1.3)

17. B *Reconstructive* means *creative* in this context. Clues: *...experience and knowledge building on each other*; the stem *–struct–* = build. (1.4)

18. D Clues: *Dewey believed that experience is an interaction between what a person already knows and the person's present situation.* (1.1)

19. C Dewey's theory does not include the idea that every experience is educative; in fact, he believed that an experience is miseducative if it distorts the growth of further experience. All the other answers are given: *...experience is an interaction between what a person already knows and the person's present situation; ...together they lead to new knowledge that in turn will influence future experience; Experience is educative only when it contributes to the growth of the individual.* (1.2)

20. D Clues: *Furthermore, truly progressive education must involve the participation of the learner in directing the learning experience.* (1.1)

21. B You can infer that William James and John Dewey would probably agree that our life experiences are a very important part of our education. Clues: *In James's theory, thought and experience are connected; James's theory supports later theories of associative learning...; Dewey asserted that experience is central to education...; ...productive experience is both the means and the goal of education.* (1.5)

22. B The added sentence further develops the idea that incoming thoughts and outgoing thoughts *become associated with each other*, mentioned in the previous sentence. (1.8)

23–25. C, E William James: *He believed that human consciousness is a stream of thoughts and feelings...waves of bodily sensations... memories of past experiences...; An incoming thought is "workable" only if it is meaningful and can be associated with something already in the person's mind.*

A, D, F John Dewey: *...learning is more than the amassing and retention of information; learning is learning how to think; Dewey felt that education should be problem–centered and interdisciplinary...productive experience is both the means and the goal of education; Dewey viewed life as a continuously reconstructive process, with experience and knowledge building on each other.* Answers (B) and (G) are not mentioned. (1.10)

PART 2 – LISTENING

EXERCISE 2.1.A (p. 215)

1. C The woman is confused by her professor's response to her paper. She says: *So I'm really confused. This is the first time I ever got a paper back with no grade on it.*
2. C The speakers mainly discuss their plans for spring break, a school vacation. The woman says: *I sure am ready for spring break!* The man asks: *Are you doing anything special?*
3. B The woman is mainly discussing her internship at a children's agency. She says: *I'll be doing an internship...; It's a nonprofit agency that works on children's issues....*
4. A The man has difficulty remembering some terms. He says: *...if only I could remember the difference between xylem and phloem. I can't seem to get it straight....*
5. D The woman suggests that he imagine a tree with key letters on it. She says: *I always think of a tree and imagine a "P" at the top, up in the branches, and an "X" at the bottom.... Now just imagine your tree tomorrow during the quiz!*

EXERCISE 2.1.B (p. 216)

1. B The speaker mainly discusses services of the Safety and Security Office. Key phrases: *The place to go for...is the Safety and Security Office; Safety and Security also provides....*
2. A The speaker mainly discusses traditions of American Indian cultures. Key sentence: *Although the original American Indian cultures were highly diverse, they were similar in many of their traditions.* The speaker then gives examples of traditions.
3. C The speaker mainly gives a classification of insurance. Key phrases: *Each kind of insurance...; Life insurance...; Health insurance...; Another kind, property–liability insurance....*
4. D The speaker mainly discusses how sand dunes shift position. Key phrases: *The dunes of Spirit Sands are constantly changing...; Here's how it works; ...the dune sort of walks downwind; It will reverse direction....*
5. A The speaker mainly discusses research in pain management. Key sentence: *There've been several influential studies in pain management.* The speaker then gives examples of research studies.

EXERCISE 2.1.C (p. 217)

1. A The speaker's main point is that attitudes toward aging can affect how long a person lives. Key phrases: *...the key to a longer life might be the way you think about yourself as you get older...; ...people who view aging positively live longer than people who view it negatively.*
2. C The speaker mainly discusses educational programs for engineers. Key phrases: *...typical four–year engineering program...; ...general engineering curriculum...; ...five–year master's degree programs....*
3. D The speaker mainly gives examples of undergraduate and graduate programs. Key phrases: *...typical four–year engineering program...; ...programs, for example, where a student spends three years in a liberal arts college...; ...five–year master's degree programs...; ...five– or six–year cooperative programs....*
4. B The instructor mainly discusses causes and effects of RSI. Key phrases: *RSI is brought on by...; RSI affects different people differently.*
5. D The instructor describes symptoms of RSI. Key phrases: *...an inflammation of the sheathing around the tendons in the hand...; ...makes your fingers painful and hard to straighten; The swelling causes a numbness or tingling sensation in the hand, and pain shoots up from the wrist....*

EXERCISE 2.2.A (p. 221)

1. A The woman says: *You should check out the job board in the student center.*
2. B The man says: *I'd like a quiet job that would allow me to get some reading done.*
3. C The man says: *...we need extra cashiers...why not volunteer to help us out? The woman says: I guess I could spare a few hours; I'll be there around noon.*
4. D The man says: *The library will give you ten dollars in book credit for every hour you work. You have to use the credit at this sale....*
5. B The woman says: *I'll be there around noon.*
6. B The woman says: *Her assignments are challenging but useful. And she has the most interesting stories to illustrate her lectures. She really makes us think; ...I'm starting to figure things out as a result of this class.*
7. D The man says: *We had to write a lot of papers; ...she really makes you work in her class!*
8. B The professor says: *These are all journal articles that I need to go through for my research. It would really help if they were arranged more logically. Can you help me?*
9. A The professor says: *Most are about primate behavior, but a few deal with other mammals or birds, or with behavioral psychology in general.*
10. B The woman says: *I have some free time tomorrow afternoon. Would that be all right?*

EXERCISE 2.2.B (p. 222)

1. C The man says: *The hunting season began in the fall and continued until midwinter.*
2. C, D The man says: *Moose, deer...were the animals sought.*
3. A The man says: *The women often accompanied their husbands on hunting parties. Their job was to take charge of the camps.*
4. B, D Women controlled clan leadership: *...a woman headed each clan, and these women were respected for their role as keepers of the clan.* Women also controlled agriculture: *...women managed all of the agricultural operations.*
5. B, D Talent is an important factor for a career in the arts: *...there are a number of factors to consider. Whether your goal is to be an actor or an animator, a saxophonist or a sculptor, talent is an essential consideration.* Experience is another important factor: *...you also need training, experience...; ...experience is the best way to get a feel for the field.*

6. B — The professor says: *...a career in the arts requires a personal sense of commitment—a calling—because art does have a history of insecure employment.*
7. C — The woman asks: *...how do we get started?* The professor replies: *Experience doesn't have to be formal. It can be part–time or volunteer work; The important thing is getting started—spending time doing something in your chosen medium.*
8. B — The instructor says: *The first step, of course, is to realize the importance of the speech to you.*
9. A, C — The speakers mention the purpose of informing others about your subject: *...decide on your purpose. Do you simply want to inform us about your subject?* The speakers also mention making your audience laugh: *Your purpose could be to make your audience laugh.*
10. B — The instructor says: *Why don't you all just take the next few minutes to start brainstorming? Jot down ideas that come to mind....*

EXERCISE 2.2.C (p. 224)

1. B — The professor mainly discusses characteristics of the sea breeze. Key sentences: *The sea breeze is the simplest, most widespread, and most persistent of local winds; The sea breeze results from the heating of land and sea along a coastline in near–calm conditions.* (2.1)
2. D — The professor says: *...a flow of air from sea to land; The airflow forms a circular pattern, from sea to land, upwards, and back out to sea.*
3. A — The professor says: *At the same time as the breeze flows from sea to land, there is a return flow higher up, from land to sea.*
4. B, D — The speaker discusses how a horn's sound is produced: *The sound is produced by vibrations from the player's lips.* The speaker also discusses early uses of the horn: *In the Middle Ages in Europe, they were used almost exclusively in hunting and warfare.* (2.1)
5. C — The speaker says: *In the eighteenth century, the horn became a regular member of the orchestra.*
6. B, D — The professor describes causes of tsunamis: *Large earthquakes with epicenters under or near the ocean are the cause of most tsunamis. Volcanic eruptions and undersea landslides are also responsible....* The professor also gives examples of tsunamis: *A tsunami was responsible for most of the deaths caused by Krakatoa...; The tsunami that wrecked Hilo, Hawaii, in 1946...; ...a catastrophic tsunami in Japan....* (2.1)
7. D — The professor says: *The term "tidal wave" is often inaccurately used for a tsunami. Tsunamis have nothing to do with the action of tides.*
8. A, C — Movement of the ocean floor causes tsunamis: *There has to be a disturbance of the earth's crust to produce a tsunami; ...accompanied by movements of the ocean floor....* Undersea earthquakes also cause tsunamis: *Large earthquakes with epicenters under or near the ocean are the cause of most tsunamis.*
9. B — The professor says: *A tsunami was responsible for most of the deaths caused by Krakatoa, yet this tsunami did not sink any ships. It did wash away several coastal villages and kill more than 36,000 people.*
10. A — The professor says: *This is what happened in 1896 during a catastrophic tsunami in Japan, which was the result of an undersea earthquake.*

EXERCISE 2.2.D (p. 225)

1. A — The students are discussing terms from a lecture. Key phrases: *...history lecture...; ...meant by "partible inheritance"...; ...what's "primogeniture"; ...the word "primogeniture."* (2.1)
2. C — The woman asks: *...what's "primogeniture"?* The man answers: *That's when all the property goes to the eldest son.*
3. D — The professor says: *So, why do so many small businesses fail each year? Well, for one thing, they usually face stiff competition from larger, more established companies. Large companies generally have cash reserves that enable them to absorb losses more easily than small firms can.*
4. D — The professor says: *It's absolutely essential to be a competent manager...; Your primary responsibilities center on planning, management, and marketing, so organizational skills are a must.*
5. B, C — One responsibility of a store owner is keeping track of inventory: *To run a store, for example, you need to know how to keep track of your inventory....* Another responsibility is promoting the store's products: *To keep your store in business, you have to adapt to changing market conditions. This means improving services or promoting your products in innovative ways.*
6. C — The woman says: *...I saw something happen—on a hike I did last weekend....*
7. D — The woman says: *I was hiking with my friend—on the desert canyon trail—and we ran into these two guys sitting by the side of the trail. ...it turns out that one of them was sort of having trouble.*
8. A, D — The young man received water from the woman: *...we gave them one of our water bottles....* He also received food from his teacher: *We asked if they had water and food, and they said a little, but their teacher went back to get some more; ...the teacher and the ranger were there. The guy was eating saltine crackers.*
9. B — The woman says: *I wondered if his muscle cramps were...because lactic acid ferments when the cell has no oxygen; ...human muscle cells make ATP by lactic acid fermentation when oxygen is scarce; This means lactate collects in the muscle as a waste product, and that causes muscle pain.*
10. A — The teaching assistant says: *Well, Julie, it looks like you saw biology in action!*

EXERCISE 2.2.E (p. 226)

1. C — The instructor says: *...it's the pigment that gives the paint its color.*
2. D — The instructor says: *A pigment should not exert a harmful chemical reaction upon the medium, or upon other color pigments it is mixed with.*
3. A — The instructor says: *Generally, pigments are classified according to their origin, either natural or synthetic.*
4. C — The instructor says: *...Tyrian purple, the imperial purple the Romans prepared from a shellfish native to the Mediterranean.*
5. A, D — Synthetic pigments are superior because they last for a longer time: *Inorganic synthetic colors...are generally the most permanent for all uses. In contrast, pigments from natural sources are less permanent than the average synthetic color.* They also provide stronger, brighter colors: *Synthetic organic pigments provide colors of unmatched intensity and tinting strength. The synthetic counterparts of the yellow and red earths are more brilliant and...are superior in all other respects to the native products.*
6. B — The professor mainly discusses different types of volcanoes. Key phrases: *...several types of volcanoes; ...shield volcanoes...; ...Cinder cone volcanoes...; ...Calderas....* (2.1)
7. A, B — Substances that erupt from volcanoes are hot gases: *...superheated gases*; and liquefied rock: *...hot liquefied rock, or magma, moves to the earth's surface, pouring out as lava.*
8. A — The speaker says: *...gently sloping shield volcanoes. The name "shield volcano" comes from their resemblance to the shields of early Germanic warriors.*
9. C — The speaker says: *Calderas, large basin–like depressions, are formed when a violent eruption blows the top off of an existing cone or when the center of a volcano collapses.*
10. A — The speaker says: *One famous caldera covers much of Yellowstone National Park; Yellowstone's famous geysers and hot springs lie within this giant basin.*

QUIZ 1 (p. 230)

1. B — The speakers mainly discuss health dangers in the workplace. The instructor says: *The computerized workplace can be hazardous to your health...; Today we'll go over what some of these hazards are....* (2.1)
2. B — The instructor says: *A good way to relieve eyestrain is to look away from the screen frequently. Focus your eyes on objects that are far away....* (2.2)
3. D — The instructor says: *Neck and back pain are a big problem for computer people. Always make sure your screen, keyboard, and chair are at the right height for you.* The man says: *...it's important to have a comfortable chair; I put a cushion on my chair, and that really helps my lower back.* (2.2)
4. C — The instructor says: *Photocopy machines aren't a health hazard for people who use them only occasionally. But for people who use them a lot, there can be bad effects. For example, people who handle the toners can get skin rashes.* (2.2)
5. C — The instructor says: *Another problem—if the machines are in an area that's not well ventilated—is ozone; Almost all photocopiers give off some ozone.* (2.2)
6. D — The instructor mainly discusses principles of perspective and related concepts. Key phrases: *Today we'll begin our discussion on perspective...; An understanding of perspective is mandatory...; Everything in perspective is related to the concept of eye level...; Another related concept is the vanishing point.* (2.1)
7. A, D — Architecture and industrial design require an understanding of perspective. The instructor says: *An understanding of perspective is mandatory for anyone who does representational drawing. This includes professionals in a variety of fields...architecture, industrial design....* (2.2)
8. D — Perspective is shown when distant objects appear smaller than close objects. The instructor says: *...objects appear smaller as their distance from the observer increases.* (2.2)
9. B — The instructor says: *The vanishing point is a point at eye level where parallel lines going away from you appear to come together and then vanish.* (2.2)
10. C — The instructor says: *...I advise you to sketch eye level and vanishing points in every drawing, at least temporarily. Eye level and vanishing points will help you convey perspective.* (2.2)

EXERCISE 2.3.A (p. 235)

1. B — The student must leave school for a family emergency. He says: *...I have a problem. My father had to have surgery, and I have to go to Oklahoma. I don't know how long I'll be gone.*
2. A — The professor says: *...you can take a grade of Incomplete. It means you would have six weeks to make up the term paper and the final exam.* (2.2)
3. D — The man would like a different meal arrangement. He says: *I'd like to change my meal plan.*
4. C — The woman's purpose is to emphasize the importance of breakfast because the man says he doesn't have time to eat breakfast in the cafeteria.
5. B — The woman's purpose is to give the man another choice of meal plan in case he would like a plan that would give him lunch and dinner.
6. A — The student wants to take a quiz that she missed. She says: *I was wondering—could I make up the quiz?*
7. C — The professor suggests that the student write about what she learned. The professor says: *...give me a one–page report, summarizing the most important thing you got out of the chapter.* (2.2)
8. C — The speakers are mainly discussing a guest speaker. Key phrases: *...he'd be happy to visit our class; ...assignment to invite a guest speaker....* (2.1)
9. A — The man's purpose is to emphasize the professor's qualifications as a guest speaker in their seminar.
10. B — The man's opinion is that the assignment will help them meet people in their field. He says: *Look at all the professional contacts we're making!*

EXERCISE 2.3.B (p. 236)

1. A The professor is giving a writing assignment. The professor says: *...it would be a good idea if this week's journal theme were along the same lines. What I'd like you to do is think and write about a time....*
2. D The woman finds the assignment boring. She says: *But isn't this the same as last week? I mean, I feel I've already written a lot about it. I had to do something like this in two of my other classes too. Can't we write about something else for a change?; I mean, I'm getting tired of writing about my life.*
3. A The main purpose of the talk is to contrast Native American and European concepts of resources. Key sentences: *...the Native Americans—compared to the European colonists—had a far greater knowledge of what resources in the environment could be eaten or made useful; For the European colonists, on the other hand, resources in the environment were seen more as commodities, as goods that could be exchanged in markets.*
4. C The professor says: *Native Americans used a wide range of resources for economic subsistence....* (2.2)
5. D The professor's purpose is to define the Native American concept of wealth, in response to the student's question.
6. A The professor's purpose is to illustrate the colonists' view of commodities by giving examples of things that could be sold for a profit.
7. D The purpose of the talk is to define what culture is. Key phrases: *What would human life be without culture; ...these aspects of our cultures...; ...what anthropologists call student culture; In a way a culture is like a club...; Culture isn't a thing. It's an idea.*
8. A The professor's purpose is to illustrate how culture involves shared ideas and behaviors. The professor says: *If you could take all the ideas and behaviors, all the tools and technology, all the things that college students share...you'd have what anthropologists call student culture.*
9. C The woman thinks student culture is similar to a club. She says: *So, what you're saying is culture is sort of like a club. College students are a club; This is why—that's what we have in common with other students—it's why our culture makes us feel like part of a club, right?*
10. B The professor thinks that the comparison is imperfect. The professor says: *In a way a culture is like a club...; But the comparison doesn't completely cut it. Think about it. A club has borders that we can define—but we run into trouble if we try to draw borders around a culture.*

EXERCISE 2.3.C (p. 237)

1. D The main purpose of the talk is to discuss ways of dealing with stress. Key phrases: *...managers have to deal with stress. Some handle it by...; Most have some favorite place or pastime...;. It's important to have some form of rest and relaxation....*
2. B The professor's opinion is that activity and exercise are forms of rest. The professor says: *It's important to have some form of rest and relaxation—creating art, working with your hands, gardening, playing sports—the list goes on. Rest doesn't always mean inactivity. For some people, exercise is rest.*
3. B The purpose of the lecture is to describe how psychologists diagnose problems. Key phrases: *...the clinical psychologist has to know what causes the client to behave the way he or she does; Identifying the cause is called diagnosis; In diagnosis a psychologist uses two basic tools....*
4. B, C The professor says: *In diagnosis a psychologist uses two basic tools: interviews and psychological tests.* (2.2)
5. A The professor's purpose is to show that a client's past behavior assists in diagnosis. The professor says: *In a diagnostic interview, the psychologist takes the client's case history. This means learning how the client got along with parents, teachers, and friends, as well as how the person handled difficult situations in the past.*
6. D The professor says: *Personality tests can reveal unconscious feelings the person is unable to talk about.* (2.2)
7. C The main purpose of the talk is to give advice about contact with bats. Key phrases: *...if you encounter a bat like that, you should...; If you have bats in your attic or house, contact...; If you should come in physical contact with a bat, it's important to....*
8. C The speaker's purpose is to give an example of how bats benefit us. The speaker says: *Bats are a normal part of our environment and can even be a good thing.*
9. A The speaker says: *To avoid having bats in your house altogether, find all possible entry points into the house and close them by caulking or screening the gap.* (2.2)
10. D The speaker recommends getting medical attention because the bat might be carrying a fatal disease. The speaker says: *Bats are the most likely carriers of rabies in our area, and almost one hundred percent of rabies cases are fatal; If possible, catch the bat so it can be tested for rabies.*

EXERCISE 2.3.D (p. 238)

1. B The professor says: *...a mechanism that releases tension. For most people, a good laugh is welcome—and worth looking for—because it brings pleasure and relief.* (2.2)
2. A The professor's purpose is to give examples of stress that is carefully controlled. The professor says: *This causes the child to experience mild stress, but in a secure setting because the stress is carefully controlled by the parent.*
3. D The professor says: *This element of shock in an otherwise safe situation is a universal characteristic of situations where people laugh.* (2.2)
4. C The professor's purpose is to show that humor is a safe way to bring about social change. The professor says: *Social rules and conventions provide us with a range of situations that we can turn into humor; Humor gives us the power to think about changing the rules. Therefore, comedians...are agents of social change.*
5. B The professor's purpose is to emphasize the importance of humor in managing anxiety. If we had no sense of humor, it would be more difficult to deal with the anxiety of failure, fear, pain, and death.

6. C The instructor discusses an example of a beautification project, the Quinte Wildflower Project. Key sentence: *The Quinte Wildflower Project proves that people can come together to preserve the beauty of the wilderness.* (2.1)
7. A The professor's purpose is to provide an intellectual context for the issue of roadside beautification. The professor says: *Catharine Parr Traill—a botanist who lived in the nineteenth century—she predicted that the natural beauty of Canada's wilderness would disappear because of agricultural development.*
8. D The professor's purpose is to trace the history of roadside beautification efforts. The professor says: *This project continues a trend to beautify North American highways that goes all the way back to the 1960s and the beginning of the Adopt–a–Highway programs...; Since the sixties, beautification programs have been...broadened....*
9. B The professor's purpose is to illustrate the success of the plantings, which produce colorful flowers for several months each year.
10. A The professor thinks that these partnerships have been shown to work successfully. The professor says: *Its greatest success has been in attracting both public interest and private sponsors. It demonstrates that government and citizens can work together... that partnerships between the public and private sectors can and do work.*

QUIZ 2 (p. 244)

1. D The students are discussing a report that they are working on. The woman says: *We don't have much time left before our presentation...; Let's talk about what we still need to do.* The man says: *I've got all my data, the graphs and photos of the mountain.* (2.1)
2. B The man's purpose is to inform the woman that he has only a little time now because he must leave soon to go to hockey practice. (2.3)
3. A, C The students will use the history of eruptions in the area: *...I'll give the history of the eruptions in that area.* They will also use a series of pictures of the mountain: *...I'll show them—first the color picture...and then the series of black–and–white photos showing the bulge.* (2.2)
4. C The man's opinion is that the photographs show the mountain's changes very well. The man says: *Aren't they awesome? Some really good shots of the mountain—you can really see how much the bulge has grown.* (2.3)
5. D The man says: *The bulge is forming 'cause a chamber of magma below the surface is growing. Earth's crust is being bent and bent....* (2.2)
6. A The main purpose of the talk is to describe some of the functions of banks. Key phrases: *Banks manage money...; Banks provide a number of important services...; ...banks also lend money; Banks provide these services...; ...their main function is to....* (2.3)
7. C, D Individuals take out bank loans to pay for education: *Ordinary people take out bank loans for a number of reasons—to pay for college...* They also take out loans to purchase a home: *...to buy or remodel a home....* (2.2)
8. C The professor says: *For a bank to make a profit, it has to collect more interest than it pays out.* (2.2)
9. D The professor's purpose is to explain how bank failures have occurred. In the past, banks failed because they did not have enough available money to give to people who wanted to withdraw all of their money. The money was not available because the banks had lent it out or invested it. (2.3)
10. B The professor says: *Bank failures...were especially common during the Great Depression of the 1930s. When Franklin Roosevelt became president in 1933, one of the first things he did was close all the banks, so depositors wouldn't panic and try to take all their money out.* (2.2)

QUIZ 3 (p. 246)

1. C The student is concerned about his grade for the course. The student says: *...it's about my midterm grade for organizational psychology. I...I'm surprised it's so...low.* (2.3)
2. B The student has spent a lot of time helping a family member, his brother. The student says: *...I've been sort of busy. My younger brother's starting classes here in January, and I have to show him around and help him find a place to live.* (2.2)
3. A The professor says: *...I don't have any record here for the second and third assignments. They were due on October 1st and the 13th.* (2.2)
4. D The professor says the student's work should be his top concern: *After all, your coursework should be your priority.* (2.2)
5. B The student's purpose is to convince his professor that he will complete the work. He suggests that he will get more organized and make up the two papers. (2.3)
6. C The main idea is that television promotes a culture of consumerism. Key phrases: *The American television industry is controlled by people who are more interested in the culture of consumerism...; Television promotes consumerism.* (2.1)
7. D The professor says: *Researchers study television to understand its effects on viewers and to measure its effectiveness in selling products.* (2.2)
8. B The professor says: *The television industry depends on advertising money to survive, and this relationship influences what television offers viewers; This means advertisers have a lot of control over what programs are made and when they are shown.* (2.2)
9. A The professor's purpose is to argue that television images of life lack depth and meaning. The professor suggests that television's images of affluence have less meaning than personal relationships have. (2.3)
10. B The professor's opinion is that television has had a mostly negative effect on society. The professor says: *...I tend to agree with critics of the media; Television promotes consumerism; It encourages greed and envy. Television helps create a wasteful society....* (2.3)

EXERCISE 2.4.A (p. 252)

1. D The student wants to obtain advice about dropping a class. The student says: *…I'm having a hard time keeping up in geometry. I think I'd better get out of the class and try again next quarter.* (2.3)
2. C The adviser says: *…why not drop your history class?* The student says: *Oh, all right. If I drop history, maybe then I'll be able to catch up in geometry.* You can predict that the student will not continue in his history class.
3. B The man has an unpaid charge on his account. The man says: *I ran into a problem when I tried to register by telephone. I got a message that said I had an outstanding charge on my account that needed to be paid….* (2.1)
4. C The woman says: *You'd better go to the accounting office and try to clear it up.* The man says: *Yeah, and I'd better make sure my roommate pays for the damage.* You can predict that the man will speak to someone in the accounting office.
5. B The student will miss the beginning of the summer term. The student says: *I registered for your psychology course for summer session. But I have to go to Vancouver and won't be back until June 25.* (2.3)
6. A The professor says: *…we'll cover the important basics during the first week; Summer session is only six weeks, and you can't afford to get a late start.* The professor implies that it is not acceptable to miss class time.
7. A The student says: *That's OK. I understand. Will you teach this course again in the fall?* You can predict that the student will take the course during the fall.
8. B The students are mainly discussing off–campus apartments for students. The woman says: *I live off campus now, in Forest Glen.* The man says: *Oh, those are the apartments in Glenwood….* (2.1)
9. C The man says: *But how did you manage to get in Forest Glen? I thought it was just for married students.* The woman says: *Three of the buildings are for married people only, but anyone can live in the rest.* You can infer that the woman is not married.
10. D The man says: *Maybe I'll look into that. You can predict that he will find out more about the apartments.*

EXERCISE 2.4.B (p. 253)

1. A The instructor says: *The elements of composition—line, shape, tone, and color—need to be well arranged, need to be ordered. They need to be coherent…just like the words and phrases and sentences in a piece of writing.* The instructor implies that composition in painting is similar to composition in writing.
2. ✓ Disagree: A composition must contain numerous subjects to be interesting: *A composition is better if it says one thing strongly than if it tries to say too many things.*
   ✓ Agree: If a picture is too crowded, it does not possess the element of unity: *A crowded composition is sort of fussy and splintered and lacks unity.*
   ✓ Agree: A successful composition conveys a single, clear message: *The artist's message is strongest when it's clear.*
3. D The main purpose of the talk is to introduce students to the course. Key sentences: *Over the next fifteen weeks, we will be observing the science of biology; This course has something for all of you to discover.* (2.3)
4. A, C Biology studies complex living systems: *In many ways, biology is the most demanding of all sciences. This is partly because living systems are so complex.* Biology also requires knowledge of other sciences: *It requires knowledge of chemistry, physics, and mathematics.* (2.2)
5. D The professor says: *Scientists are people who ask questions about nature and who believe that these questions can be answered. Scientists are explorers who are passionate about discovery.* The professor implies that scientists are enthusiastic in their study of nature.
6. C The professor says: *If you're a biology major or a pre–medical student…; If you're a physical science or engineering major…; And if you're a non–science major….* You can infer that the students in this course are pursuing various fields of study.
7. C The professor says: *A hormone is a chemical signal. …it triggers responses in cells and tissues.* (2.2)
8. B The professor says: *The growth of a plant toward light is called "phototropism."*
9. B, C You can infer that a seedling with the tip cut off would not bend toward light: *The Darwins observed that a grass seedling could bend toward light only if the tip of the shoot was present. If the tip was removed, the shoot would not curve toward light.* You can also infer that a seedling wearing a black cap would not bend toward light: *The seedling would also fail to grow toward light if the tip was covered with an opaque cap.*
10. D The professor says: *The Darwins proposed the hypothesis that some signal was transmitted downward from the tip into the part of the stem that controlled growth; These chemical messengers were hormones.* You can infer that the tip of a plant's stem produces a hormone that affects the stem's growth.

EXERCISE 2.4.C (p. 254)

1. C The man cannot think of a topic for his paper. He says: *I'm having trouble coming up with a good idea.* (2.1)
2. A The woman says: *What about the culture of…your hometown?* The man says: *I grew up in a small town where almost everyone works in the orchards; Well, why not? It's something I know a lot about.* You can predict that the man will describe his hometown culture.
3. C There was a death in the student's family. The student says: *My great aunt passed away and her funeral is tomorrow.* (2.3)
4. A The student asks: *…would it be possible for me to take the test next week?* The professor says: *Of course. Eric handles all make–ups; Can you stop by the office today and make an appointment with him?* You can predict that the student will arrange to take the test next week.

5. C The books that the man needs are a strain on his finances. The man says: *I can't believe how much my books cost this semester; It's a little more than my budget can handle at the moment.* (2.1)
6. D The man says: *And I still need the book for chemistry; I wonder if they'd have my chemistry book.* You can infer that he is taking a chemistry course.
7. A The woman says: *...did you know there's another bookstore...? They carry used copies of most of the textbooks for the university.* The man says: *That's not a bad idea. Where did you say that was again?* You can predict that the man will look for a cheaper copy of the chemistry book.
8. A The man says: *Now, this is a powerful drug, so you need only—no more than two capsules every six hours. And you shouldn't drink alcohol, drive a car, or operate machinery.* The man implies that the medication may be dangerous if taken incorrectly.
9. B The woman says: *Uh oh! I have a big test tomorrow!* You can infer that she is concerned about taking the medication before the test.
10. D The man says: *...you could take two capsules three or four hours before your test.* The woman says: *OK. Well, I guess I have no choice.* You can predict that the woman will take the medicine a few hours before the test.

EXERCISE 2.4.D (p. 255)

1. B The man owes a fee for his lab section. The woman tells him: *The computer shows that you haven't paid the lab fee for your biology class. You'll need to do this before you can attend your lab section.* (2.1)
2. C The woman says: *I'm afraid you'll have to pay it at the cashier's office.* The man says: *OK. I'd better take care of it right away.* You can predict that the man will go to the cashier's office.
3. C The students are discussing birds. Key phrases: *...its song...; ...ate all the fruit in their orchard; ...the black is mixed with a little green, making their feathers look iridescent.* (2.1)
4. A, B You can infer that starlings live in rural and urban areas: *I didn't even know they lived in the city; ...the starlings always ate all the fruit in their orchard.* You can also infer that starlings are a problem for fruit growers: *...the starlings always ate all the fruit in their orchard.*
5. C The student will not attend class today. The student says: *I was going to tell her I wouldn't be in class today....* (2.3)
6. A The secretary says: *...Dr. Owada isn't on campus today because she had a conference to go to. She'll get the message tomorrow.* The secretary implies that Dr. Owada will be absent until the next day.
7. D The secretary says: *...Professor Strong will be giving the lecture today.* The student says: *Oh, it's too bad I'll miss that.* You can predict that the student will miss the lecture by Professor Strong.
8. C The people are discussing a television series. The woman says: *Did anyone happen to catch "The American Metropolis" last night; The program you saw was part of the same series....* (2.1)
9. D The man says: *...there was a huge population explosion that turned America into a nation of cities, all within a decade.* You can infer that the population of the United States grew rapidly.
10. A, D You can infer that New York City was originally five cities: *...the five separate municipalities of New York...; ...those five municipalities were officially united as a single city....* You can also infer that New York has a borough called Brooklyn: *...each borough maintains traces of its original independence; I agree with that. I'm from Brooklyn, and it's definitely different from the rest of New York.*

EXERCISE 2.4.E (p. 256)

1. D The professor says: *Since this is an intro course, you need only a general understanding of the process for now.* You can infer that the course is a general course in life science.
2. B The professor says: *There's a wonderful videotape I'd like you to know about that will help you review for the test next week; I highly recommend it. In fact, you can expect to see examples from it on the test.* The professor implies that the videotape covers material that will be on the next test.
3. C The instructor discusses the origins of jazz. You can infer that the talk is most appropriate for a course titled Music History.
4. C The instructor says: *...the folk music known as the blues, whose origins lay in the work songs...; ...the blues evolved into popular commercial music.* The instructor implies that the blues changed and developed over time.
5. A "St. Louis Blues" combined elements of different musical styles. The instructor says: *Adapting the African–American folk idiom to European conventions of orchestration and harmony, Handy produced a hit song. The "St. Louis Blues" was tremendously influential....* (2.2)
6. ✓ Yes: Jazz was one of the most popular styles of music in the 1920s: *...the music entered the mainstream and even gave its name to the decade of the 1920s.*
   ✓ No: Jazz originated in the electric style of blues from Chicago: Not supported by the information in the talk.
   ✓ Yes: Jazz includes sounds from folk, popular, and classical music: *Jazz, blending African–American folk roots with elements of popular music and European classical traditions....*
7. C The main purpose of the lecture is to describe how various sea animals move. Key sentences: *A sea animal has to push itself through water in order to move; Sea animals use many different ways to swim, creep, or glide through water.* (2.3)
8. A The professor says: *The size of a fish's tail contributes to its swimming speed; Long, pointed tail lobes, like those on the marlin, are found only on fast swimmers.* You can infer that the fastest swimmer is the fish with the longest, most pointed tail fins.

9. B The professor says: *Because their ancestors lived on the land, they developed tails that moved up and down. Whales and dolphins wave their tails up and down....* You can infer that whales and dolphins move their tails as land mammals do.

10. D The professor says: *...the creatures that live on the bottom of the sea....creep on a single flat piece of muscle called a foot. Ripples pass along the foot, which allows these animals to glide smoothly forward.* You can infer that creatures that live on the bottom of the ocean move slowly and fluidly.

QUIZ 4 (p. 261)

1. D The speakers mainly discuss an opportunity for the man to work at a television station. The man says: *There's an opening at channel 12 that kind of interests me—an internship. I was kind of thinking of applying for it.* The woman asks: *You mean the television station? What sort of job?* (2.1)

2. B, D The man would like television work in the future: *Some day I'd like to write, or produce.* Also, the man will gain production experience: *It's a part-time internship for production assistant. Production work, general stuff...; It's the experience—the chance to work in television....* (2.2)

3. C The man says: *I probably don't stand much of a chance....* You can infer that he does not feel confident about getting the internship. (2.4)

4. A The woman's purpose is to reassure the man about his chance of getting the position. The woman says: *You never know. Sometimes it's not the credentials but the person who matters.* (2.3)

5. D The woman asks: *You want a recommendation?* The man says: *Uh, yeah, like I said, I need all the help I can get.* You can infer that the man wants the woman to write a letter of recommendation. (2.4)

6. A The speakers mainly discuss hiking safely in bear habitat. The speakers are a naturalist and members of a hiking club. The naturalist says: *One or two bear attacks occur each year in Glacier Park; In bear country, noise is good for you. Hiking quietly endangers you, the bear, and other hikers; Some trail conditions make it hard for bears to see, hear, or smell approaching hikers.* (2.1)

7. A The naturalist thinks bear bells are not effective in keeping away bears. The naturalist says: *Most bells—even the so-called bear bells—are not loud enough. Calling out or clapping hands at regular intervals are better ways to make your presence known.* (2.3)

8. C The naturalist's purpose is to warn that bears many not notice you in certain conditions in which they cannot see, hear, or smell you approaching. (2.3)

9. A The naturalist says: *They may appear to tolerate you, and then attack without warning.* You can infer that bears may respond to people suddenly. (2.4)

10. B, D Hikers should avoid approaching a bear: *The most important advice I can give you is never to approach a bear intentionally.* Hikers should also avoid hiking when it is dark: *...avoid hiking early in the morning, late in the day, or after dark, when bears are more likely to be active.* (2.2)

QUIZ 5 (p. 263)

1. B The speakers mainly discuss how science and technology are connected. The professor says: *Today we'll focus on science and technology; ...technology often applies the discoveries of science; Science and technology are partners.* (2.1)

2. A The professor says: *...technology often applies the discoveries of science. Can anyone think of an example; The electron microscope is an excellent example of applied science.* (2.2)

3. D The professor's purpose is to give examples of technology that came before science. The professor says: *In fact, technology came before science in our prehistory. Technology was driven by inventive humans who built tools, made pottery, designed musical instruments, and so on, all without science....* (2.3)

4. C The professor means that technology has both helped and harmed us. A double-edged sword cuts both ways, and so does technology. Technology helps us: *It enables us to cure diseases so people can live longer.* It also harms us: *...environmental consequences...; ...nuclear accidents, toxic waste, extinction of species....* (2.4)

5. B The student says: *I think scientists have a responsibility to educate politicians and the public about the consequences of certain technologies. This is why...I've decided to get a master's degree in public policy.* (2.2)

6. A, C The speakers mainly discuss forestry as a profession: *...professional forester; ...our professional organization...; ...over 700 job categories.* They also discuss where foresters work: *Foresters...do work in the woods...they also work in laboratories, classrooms, planning agencies, corporate offices....* (2.1)

7. A The forester says: *Managing a forest is both a science and an art, which is why my education included courses in the biological, physical, and social sciences, as well as the humanities.* You can infer that the profession of forestry is a broad field requiring diverse skills. (2.4)

8. B The student wants to understand how national parks and forests are different. He knows about some similarities between them, but is confused about the differences. (2.3)

9. D The forester says: *National parks...are set aside and preserved in a near-natural state...; National forests, on the other hand....are managed for their many benefits, including...wood products....* You can infer that national parks do not supply commercial wood products. (2.4)

10. C The forester's purpose is to show that foresters and biologists have shared interests and often work together to preserve forest habitats. (2.3)

EXERCISE 2.5.A (p. 268)

1. B–C–A The speaker says: *One of the most common tubular drums is the long drum; This drum was carved from a length of tree trunk...; For vessel drums, we have the kettledrum. Kettledrums have a single membrane stretched over a pot or vessel body; The frame is shallow...; A lot of frame drums—like this Turkish tar—have metal jingles attached to the rim.*
2. C–B–A The professor says: *The entrance zone may serve as a place of shelter for animals or people. Prehistoric humans used entrance zones of caves as shelters and burial grounds. The twilight zone is sheltered from direct sunlight and is home to a large, diverse population of animals such as...bats...; In the dark zone live animals that have adapted to the world of darkness, including small shrimp....*
3. ✓ No: Warm temperatures: Not supported by the information in the talk.
   ✓ Yes: Blind animals: *In the dark zone live animals that have adapted to the world of darkness...; These animals are usually blind, and some lack eyes altogether.*
   ✓ Yes: Few air currents: *Perpetually dark, it has...few if any air currents.*
   ✓ No: Green plants: *...no green plants grow in caves....*
4. ✓ Extravert: Prefers looking outward to the world: *Extraverts turn outward—to the world around them....*
   ✓ Introvert: Prefers learning in private, individual ways: *Introverted people usually prefer to learn in private, individual ways.*
   ✓ Extravert: Has a variety of interests: *Extraverts, therefore, usually have a variety of interests....*
   ✓ Introvert: Has fewer interests, but on a deeper level: *Introverts pursue fewer interests, but on a much deeper level.*
5. A The professor says: *Introverts look inward for resources; They sort of take a reflective approach to life; Introverted people usually prefer to learn in private, individual ways.* You can infer that an introverted student would prefer reflective journal writing. (2.4)
6. B The main purpose of the talk is to discuss some effects of inflation. Key phrases: *One of the major problems in our economy is inflation...; Thus, a person has to work more hours...; ...the same money buys fewer things, and everybody's standard of living goes down....* (2.3)
7. B The instructor's purpose is to illustrate the effect of price changes. The instructor says: *For example, let's say that this year a loaf of bread costs $1.00...; That means...; ...the price of the bread goes up to $1.25...; That means...; Inflation means that the same money buys fewer things....* (2.3)
8. D The instructor says: *...inflation, a situation in which prices are going up faster than wages. Thus, a person has to work more hours to pay for the same items.* (2.2)
9–10. ✓ Hyperinflation: People try to get rid of their currency: *And then there is hyperinflation—inflation so severe that people try to get rid of their currency before prices rise further....*
   ✓ Moderate inflation: Incomes and relative prices rise slightly: *Moderate inflation does not distort relative prices or incomes severely.*
   ✓ Galloping inflation: Inflation occurs at a rate of 100 percent in a year: *Galloping inflation happens rapidly, say at a rate of 100 percent or more within a year.*
   ✓ Hyperinflation: There is social and political disorder: *Times of hyperinflation are usually characterized by social and political turmoil.*

EXERCISE 2.5.B (p. 269)

1. C The purpose of the talk is to assist students in career planning. The speaker is a career counselor. Key phrases: *There are a great many careers...; You find these careers in...; It is your job to find out, during your college years, into which of these two job categories you fit, and to plan your career accordingly.* (2.3)
2. A, D Engineers and accountants are likely to be specialists: *There are a great many careers in which the emphasis is on specialization. You find these careers in engineering and in accounting....* (2.2)
3. ✓ Generalist: Skilled in directing other people: *..."generalists" are particularly needed for administrative positions, where it is their job to see that other people do the work....*
   ✓ Specialist: Concerned with tools and technique: *Specialists understand one field; their concern is with technique, tools....*
   ✓ Specialist: Trained in a technical or professional field: *They are "trained" people, and their educational background is technical or professional.*
   ✓ Generalist: Must be able to make overall judgments: *...a demand for people who are capable of seeing the forest rather than the trees, of making overall judgments.*
4. B The speaker says: *..."generalists" are particularly needed for administrative positions, where it is their job to see that other people do the work...; Generalists—and especially administrators—deal with people. Their concern is with leadership, with planning, with direction, and with coordination.* (2.2)
5. D The speaker says: *There are a great many careers in which the emphasis is on specialization; ..."generalists" are particularly needed for administrative positions...; Any organization needs both kinds of people....* You can infer that both specialists and generalists can find jobs. (2.4)
6. D The instructor mainly describes each leaf arrangement and gives an example. Key phrases: *...the one called alternate, each leaf is attached at a different level on the stem. This poppy is a good example; Another type is the opposite arrangement; The bee plant's leaves are paired on opposite sides of the stem; This one's called basal, and our example is the amaryllis.* (2.1)

7. B — The instructor says: *...the one called alternate, each leaf is attached at a different level on the stem; ...there's a leaf here, on the right side, and above that a leaf on the left here, and above that, one on the right again...and so on, alternating right and left, all the way up the stem.* (2.2)

8–9. ✓ Opposite: The plant's leaves are paired on the opposite sides of the stem: *The bee plant's leaves are paired on opposite sides of the stem.*

✓ Basal: All the plant's leaves are at ground level: *Notice how all the leaves are at ground level, at the stem's base.*

✓ Alternate: Each leaf is attached at a different level on the stem: *...the one called alternate, each leaf is attached at a different level on the stem.*

✓ Opposite: The leaves are attached at the same level on the stem, but on different sides: *...they're attached at the same level of the stem, but on opposite sides.*

10. B — The instructor says: *I have some lovely samples to share with you today. I'd like you all to come up and examine the contents of...these two tables. Many of them are specimens of the sunflower family....* You can predict that the students will look at flower samples. (2.4)

EXERCISE 2.6.A (p. 275)

1. C — The purpose of the talk is to explain how to draw with pen and ink. Key phrases: *If you are unsure of drawing directly in pen and ink, start off with...; ...to allow the ink to flow easily; ...using light and dark strokes of the pen.* (2.3)

2. ✓ Yes: Draw the outline of the violin: *...add contrast by drawing the outline of the violin with gently curved lines.*

✓ No: Take a photograph of the subject: *Not supported by the information in the talk.*

✓ Yes: Study the subject for a few minutes: *Take a few minutes to study your subject—this chair and violin.*

✓ No: Rub the violin strings with a bow: *Not supported by the information in the talk.*

3. D — The professor says: *The Rogers Pass stretch of the Trans–Canada is at risk of being buried in snow...; ...it's important to control an avalanche when it's small...before it builds up into a serious danger.* (2.2)

4. A, C — The natural causes of an avalanche are the weight of the snow and the pull of gravity: *The weight of the snow, together with the force of gravity, is what starts an avalanche.* (2.2)

5. C–A–B–D — The professor says: *(1) A team of snow technicians monitors the snowpack. They sort of "read" the snow and try to predict when it's likely to slide; (2) ...they close the road and remove all traffic from the pass; (3) A ten–man artillery crew operates a mobile 105 mm howitzer, firing shells into the slopes; (4) This sends out shock waves that trigger the avalanches.*

6. ✓ No: Salmon compete with eagles for food: Not supported by the information in the discussion.

✓ Yes: Young fry swim downstream in rivers: *As fry, the fish then migrate downstream via rivers.*

✓ Yes: Adult salmon migrate home to spawn: *When mature, the salmon form into groups of common geographic origin and migrate back toward the river they emerged from as juveniles.*

✓ No: Salmon die from pollution in rivers: Not supported by the information in the discussion.

7. B, D — Salmon find their way home by seeing the sun's position: *...they navigate by the position of the sun.* They also smell the water: *...their keen sense of smell takes over; The water flowing from each stream carries a unique scent.* (2.2)

8. C — The sight of leaping salmon amazed the student. She was surprised to see a fish jump up a waterfall, and then she was amazed to see several others also jump. (2.3)

9. D — The professor says: *Salmon provide an important link in the food chain; When they make their return journey, they carry nutrients from the ocean back to the rivers and streams.* (2.2)

10. A — You can conclude that baby salmon eat the bodies of dead salmon. After salmon spawn, they die. Their dead bodies, or *carcasses*, become the food source for many organisms, including *their own newly hatched offspring.* (2.4)

EXERCISE 2.6.B (p. 276)

1. D — The professor mainly gives a description of a process. Key phrases: *The complex process inside a leaf...; During this process...; First...; Once...; When...; Then...; Finally....* (2.1)

2. A, C — Carbon dioxide and water must be present. The professor says: *Carbon dioxide and water—these are the raw materials for photosynthesis. Once carbon dioxide and water are present, photosynthesis can begin.* (2.2)

3. ✓ Yes: Chlorophyll absorbs light from the sun: *When sunlight shines on a leaf..., its energy is absorbed by molecules of chlorophyll.*

✓ Yes: The leaves take in water and carbon dioxide: *First, the pores on the leaf's outer skin open up and take in molecules of carbon dioxide. Water...enters the leaf through its stem.*

✓ No: The plant pushes roots through the soil: Not supported by the information in the lecture.

✓ Yes: Hydrogen combines with carbon dioxide: *...hydrogen from the water combines with carbon dioxide....*

4. B — The professor says: *We experimental psychologists are interested in developing laws about human behavior so we'll be able to understand and predict what people do and why they do it.* (2.2)

5. A — The professor says: *...to develop laws about human behavior, we must assume there's some regularity to it. We can't be psychologists without making the assumption that behavior follows certain patterns.* (2.2)

6. B — The professor says: *The Law of Effect states that whether or not a person will repeat a behavior depends on the effect that behavior has; If the action is not rewarded, or if it's punished, it's not likely to be repeated.* If a boy stops pulling a cat's tail when the cat bites him, you can infer that it is because of the Law of Effect. The cat's bite punishes the boy's action, so the boy does not repeat the action. (2.4)

7. C–B–D–A — The professor says: *(1) First, using available knowledge, a psychologist makes a hypothesis about behavior; (2) Then, the psychologist tests the hypothesis through an experiment; (3) ...many repetitions of the experiment must be conducted under different conditions; (4) Only repeated verification...will result in a law.*

8. B — The professor says: *...marshes usually don't contain trees or shrubs. Marsh vegetation is usually soft–stemmed or herbaceous—for example, grasses....* (2.2)

9. ✓ — Yes: Dead plants and animals contribute energy to the food chain: *...an abundance of dead plant and animal material—energy–rich organic matter—enters the food chain each year.*

✓ — Yes: Acids from decaying vegetation turn the water brown: *The water in marshes may become tea–colored or dark brown because of the organic acids from the decaying vegetation.*

✓ — No: The marsh is drained for agricultural development: Humans have drained marshes, but this is not a biological process.

✓ — Yes: Bacteria and fungi break down organic matter in the water: *And much of this energy–rich biomass is broken down by bacteria and water fungi.*

10. C, D — Wetlands have been destroyed because they were thought to cause disease: *In the past, humans have viewed these marshes—and most wetlands—as the source of...disease.* Also, land was needed for agriculture: *Humans have destroyed a lot of wetlands, mostly to make way for agricultural development.* (2.2)

QUIZ 6 (p. 279)

1. A, D — Plant life and sunlight characterize the upper zone: *The clear, sunlit waters near the surface are an ideal place for the microscopic plants called plankton to grow.* (2.2)

2. ✓ — No: Large fish regulate their body temperature: Not supported by the information in the talk.

✓ — Yes: Animal plankton eats plant plankton: *The tiny plant plankton provides food for tiny animal plankton....*

✓ — Yes: Microscopic plants grow in sunlit water: *...an ideal place for the microscopic plants called plankton to grow.*

✓ — Yes: Large schools of fish feed on plankton: *Huge schools of fish...cruise the upper waters to eat the animal plankton.* (2.6)

3. B–C–A — The professor says: *The clear, sunlit waters near the surface...; About 200 meters below the surface...is a dimly lit twilight world; Utter darkness usually begins at a depth of 1,000 meters....* (2.5)

4. C, D — The worker bee defends the colony and gathers the food. The professor says: *The worker bees...do all the work that is done in the hive. They...gather pollen, feed and rear the brood, and fight all the battles necessary to defend the colony.* (2.2)

5. D–A–B–C — The professor says: *(1) Each egg is laid by the queen bee, who deposits it in the bottom of the worker cell; (2) After three days, the egg hatches into a small white worm called a larva...; (3) The larva then enters the pupa state; (4) When the adult worker emerges from the pupa....* (2.6)

6. C–A–B — The professor says: *Located in the abdomen are the honey sac and the sting, with its highly developed poison sac; On the head are the mandibles, the jaw–like organs which enable the bees to perform the necessary hive duties and to mold the wax and build their combs; The honey bee's four wings and six legs are fastened to the thorax.* (2.5)

7. B, C — The speaker discusses where bread originated: *The first bread was made in the Nile valley about 10,000 years ago.* The speaker also discusses grains that are grown today: *wheat, rye, and oats.* (2.1)

8. ✓ — Yes: People discover that yeast makes bread rise: *Leavened breads and cakes, which are made to rise by the action of yeast, were also a discovery of the ancient Egyptians.*

✓ — No: Beer is commonly used in making bread: Not supported by the information in the talk.

✓ — Yes: Primitive bread is made on heated stones: *Primitive bread was not like the bread we know today because it was simply flour dough dried on heated stones.*

✓ — Yes: The Egyptians invent the art of baking: *The Egyptians were the first people to master the art of baking.* (2.6)

9. C — The speaker says: *...many families had to bake their dough in communal bakeries. To identify their loaves, each household would make a distinctive mark on the bread, sometimes with a special stamp bearing the family name.* (2.2)

10. ✓ — Oats: Mainly fed to cattle: *Oats are grown in temperate regions and are mainly fed to cattle....*

✓ — Wheat: Used to make bread and pasta: *The large grains of bread wheat...produce light, airy bread. Another widely cultivated variety of wheat...goes into making pasta.*

✓ — Wheat: Rich in a protein called gluten: *The large grains of bread wheat are rich in gluten—a kind of protein....* (2.5)

QUIZ 7 (p. 281)

1. A, B — Improvisation is difficult to define because there are several kinds: *We hear about the different types of improvisation: "free" improvisation and "controlled" improvisation and "collective" improvisation.* Also, people disagree about what improvisation is: *Every jazz player knows what he or she means by improvisation. And all writers know what they mean by improvisation. The result, of course, is a lot of confusion and disagreement about what improvisation really is.* (2.2)
2. C — The professor discusses the history of improvisation. Key sentence: *Let's try to understand it more by looking at history.* (2.1)
3. C — The professor says: *In the beginning, music was largely improvisational, supplied on the spur of the moment by prehistoric people who "made" music....* (2.2)
4. ✓ — Prehistoric humans: Made music for work, play, and war: *...prehistoric people who "made" music for work, play, war....*
   ✓ — Jazz musicians: Combined their own music with stock melodies: *...the early jazz musicians were very similar to the ancient Greeks in that they were making a music partly their own and partly derived from the "stock melodies" in their environment.*
   ✓ — Prehistoric humans: Used music as a force to show relationships: *...music was a force that communicated the relationship of people to nature, and people to each other.*
   ✓ — Jazz musicians: Improvised on the music of other bands: *...black musicians improvised on the European melodies they heard white bands playing.* (2.5)
5. D — The professor says: *There were a number of musicians who'd played in army bands, and they had training of one kind or another. It was these trained military bandsmen who were responsible for the rise of jazz improvisation.* The professor implies that early jazz improvisation was developed by trained musicians. (2.4)
6. D — The main idea is that children go through stages of mental and social development. Key phrases: *...mental development is related to social development...; ...children gradually acquire...; ...the egocentric stage of social development; ...the multiple role–taking stage.* (2.1)
7. A — The professor says: *...at around four to six years old, they can focus on only one thought at a time; ...don't yet understand that other people may see the same event differently from the way they see it. They don't reflect on the thoughts of others.* (2.2)
8. B — The professor's purpose is to illustrate how children must experience something directly to understand it because they cannot yet think abstractly at six to ten years old. (2.3)
9. A — The professor says: *Children can now manage various social roles...; Because they can play multiple roles, this stage is known as the multiple role–taking stage.* You can infer that children in the multiple role–taking stage know that different social roles require certain behavior. (2.4)
10. ✓ — Yes: The child understands actions as others see them: *...on a social level, children can now understand actions as an outsider might see them.*
    ✓ — No: The child prefers large crayons and paint brushes: Not supported by the information in the lecture.
    ✓ — No: The child is interested in learning about nature: Not supported by the information in the lecture.
    ✓ — Yes: The child can judge actions as they affect all people: *...the young teenager is now able to judge actions by how they might influence all individuals....* (2.6)

QUIZ 8 (p. 283)

1. C — The woman wants to talk about ideas for her project. The woman says: *I was hoping...we could talk about the project that's due at the end of May; I have an idea...it's something that interests me.* (2.3)
2. B — The woman asks: *...the project plan...that part's due next week, right?* The professor replies: *Uh...yes, that's right, the first due date—the project plan—is due next week, on Monday, May 3.* (2.2)
3. B — The woman says: *I'm a little—I'm not sure about what you want. You can infer that she doesn't understand the assignment.* (2.4)
4. A, C — You can predict that the woman will write about an economic development organization: *...she works for economic development...; ...a case study of an economic development organization....* You can also predict that she will write about how an organization promotes social change: *...also for social change because it's work that affects women and their role in society; I could do a case study about a group that works for both economic and social change.* (2.4)
5. ✓ — Not include: Photographs of art: Not supported by the information in the conversation.
   ✓ — Include: Information from a Web site: *...information from their Web site.*
   ✓ — Include: An interview with her boss: *...I'd like to interview my boss...; ...combine the interview data....*
   ✓ — Include: A product catalog: *...their product catalog...; ...an analysis and evaluation of their catalog.* (2.4)
6. C — The professor says: "*Mesa" means "table" in Spanish. The Spanish people who explored the area thought these flat–topped hills looked sort of like tables. A mesa is wider than it is high—kind of like a large table.* (2.2)
7. A, D — One reason for the erosion of a mesa is that the rock on the sides is softer than that on the top: *The sides of a mesa are often made of shale or softer sandstone.* Another reason is that the force of water cuts away the softer rock: *The slope of the sides will increase the water's speed and force as it runs down; Debris carried by the running water cuts away the softer surface rock.* (2.2)

8. B — The professor's purpose is to describe the appearance of spires by comparing them to chimneys. (2.3)

9. C–A–D–B — The professor says: *(1) As a mesa is shrunk in size by water, it may be cut into smaller landforms; (2) Further erosion can change a butte into a tower or spire; (3) Further erosion of the softer rock may reduce the spire.... Over time, erosion finally topples these rocks to the ground; (4) ...they might undergo further erosion that completely demolishes them so they disintegrate into pebbles. Finally, these pebbles end up as the sand we walk on....* (2.6)

10. B — The professor says: *On a mesa, conditions are optimal for erosion. With enough time, even the durable top of a mesa will decrease in size; Further erosion can change a butte into a tower or spire; Further erosion of the softer rock may reduce the spire...; Over time, erosion finally topples these rocks to the ground.* You can conclude that erosion continually changes the shape of rock. (2.4)

PART 3 – SPEAKING

EXERCISE 3.5.A (p. 311)

Key points:

- The university is offering a training course for students who want to be tutors.
- The woman thinks that the man should enroll in the course.
- One reason she gives is that the course will give him valuable experience for being a teaching assistant in graduate school.
- Another reason is that he would learn some practical theories about teaching and learning.
- Another reason is that the course might give him skills that could be useful for whatever kind of work he does later.

EXERCISE 3.5.B (p. 312)

Key points:

- The college is considering a proposal that would increase the physical education requirement from one course to two courses.
- The man does not support the proposal to increase the physical education requirement.
- One reason he gives is that students should make the choice to get exercise, and it is not the college's responsibility to require it.
- Another reason is that students' main job is to study and exercise their brains, not their bodies.
- Another reason is that he already gets a lot of exercise outside of school.

EXERCISE 3.5.C (p. 313)

Key points:

- The college is offering a course in theater production to members of the community who are not college students.
- The man's opinion is that the course is not fair because it discriminates against college students who are not in the Theater Arts program.
- One reason he gives is that students pay tuition and fees, so they should be allowed to take any course they want.
- Another reason is that students may want to take the course just to have fun and learn about theater.

EXERCISE 3.5.D (p. 314)

Key points:

- There is an on–campus childcare center for the children of students; however, space at the center is limited.
- The woman's opinion of the childcare center is that the service is not satisfactory.
- One reason she gives is that the center does not have enough space, and many children are on the waiting list for a long time.
- Another reason is that the lack of space prevents a lot of parents from going to college.
- Another reason is that the center closes too early for some parents who take evening classes.

EXERCISE 3.6.A (p. 318)

Key points:

- Emotional intelligence consists of self–awareness, self–control, self–motivation, enthusiasm, and social ability. People with emotional intelligence understand their feelings.
- The young people in the study were extremely intense and enthusiastic, which are qualities of emotional intelligence.
- Emotional intelligence causes young people to experience emotional highs and lows and to feel everything very strongly.
- Emotional intelligence causes young people to think deeply about everything.
- Young people with emotional intelligence often experience problems because they are different from everyone else.

EXERCISE 3.6.B (p. 319)

Key points:

- During a boycott, people refuse to buy, sell, or trade with an individual or business that they believe to be doing something morally wrong.
- According to the lecture, the cause of the grape boycott was the refusal of the grape growers to accept the union of the grape pickers.
- There were several effects of the grape boycott: workers stopped picking grapes; many people marched in support of the pickers; eventually some grape growers signed agreements with the union.
- The lettuce boycott was caused by the lack of union contracts; the effect was that people refused to buy lettuce.
- An effect of both boycotts was the negative attention directed at the growers.

EXERCISE 3.6.C (p. 320)

Key points:

- Role conflict is the stress or tension a person feels because of playing different social roles at home, school, and the workplace.
- Role conflict occurs when there is competition between the expectations of different role partners.
- College students may feel conflict between the role of child and the role of friend.
- Mature adults, especially women, experience role conflict because of the tension between responsibility to an employer and responsibility to family.

EXERCISE 3.6.D (p. 321)

Key points:

- Spatial memory is the ability of animals to remember and recognize objects in the environment.
- Some species of birds use their spatial memory of landscape features to accurately remember where they have hidden food.
- Spatial memory enables some animals to find and investigate new objects in their environment. For example, baboons can quickly find a new object in their pen and will examine the object; they will ignore objects that are not new.

EXERCISE 3.7.A (p. 326)

Key points:

- The woman wants to share a dormitory room on campus with her best friend from high school.
- The man's opinion is that the woman should not share a room with her best friend.
- One reason he gives is that it can destroy a friendship because knowing someone isn't the same as living together.
- Another reason is that having someone else for a roommate will allow her to meet new and interesting people.
- Another reason is that she might benefit by living in a dormitory with other students of her academic major.

EXERCISE 3.7.B (p. 327)

Key points:

- A mild form of depression is linked to changes in the amount of daylight during a certain time of the year, usually fall or winter, when the periods of daylight are shorter.
- The disorder is related to the body's biological clock and to changes in body temperature and hormone levels.
- Symptoms are similar to those of a major depression but usually not as serious; they include lack of energy, a desire to sleep more, and a tendency to gain weight.
- The symptoms usually disappear when the days start getting longer in the spring.
- One treatment involves exposure to a special light that fools the body into thinking that it is getting sunlight.

EXERCISE 3.7.C (p. 328)

Key points:

- The program seminar is the primary mode of instruction for students at the college.
- The woman's opinion is that she will not like seminars.
- One reason she gives is that seminars seem similar to class discussions in her high school, which were boring because a few students always did all the talking.
- Another reason is that she would rather listen to the professor because the professor has all the knowledge, not the students.

EXERCISE 3.7.D (p. 329)

Key points:

- Pollock tried to express his feelings through painting; abstract expressionism emphasized personal expression.
- Pollock was devoted to the process of painting; abstract expressionism valued the act of painting and is also called action painting.
- Pollock painted his huge canvases on the floor; large canvases characterize abstract expressionism.
- Pollock dripped paint onto the canvas in a skillful, controlled gesture; abstract expressionism emphasized surface qualities of paint such as brushstroke and texture.

EXERCISE 3.8.A (p. 334)

1. Key points:
   - The man's problem is that his elbow is sore, but he does not want to miss baseball practice because his coach will be angry.
   - The woman suggests that he go to the clinic and have someone look at his elbow.
   - The woman suggests that he not play baseball and tell his coach about his elbow.
   - The woman suggests that he ask his boss for something else to do besides lifting heavy things.
   - The woman suggests that he look for a different job.
2. Key points:
   - The woman's problem is that she still needs another course in social science, but it appears that nothing will fit into her schedule for Winter Quarter.
   - Her adviser suggests that she wait until Spring Quarter to fulfill the social science requirement. However, the woman will be doing a full–time internship in the spring.
   - Her adviser suggests that she take an evening course.
   - Her adviser suggests that she wait until summer to fulfill the social science requirement.
3. Key points:
   - The man's problem is that his learning partner is lazy and has not done any work on a project for which they will be graded together.
   - The woman suggests that he have a serious talk with his partner and lay out a plan for completing the project.
   - The woman suggests that he let his professor know about the problem.
   - The woman suggests that he look around for another group to join in doing the project.
4. Key points:
   - The woman's problem is that her car does not always start; she needs to have it checked out, but her regular mechanic is expensive, and she still must pay her tuition.
   - The man suggests that she take her car to the community college program in automotive technology, where students can have their cars fixed for less money than it usually would cost.
   - The man suggests that she check the bulletin board in the Student Center to find a mechanic that is not expensive.
5. Key points:
   - The man's situation is that he will miss an upcoming test, but he has already missed one test and is in danger of not receiving credit for the course (failing).
   - His professor suggests that he try not to miss this test and try to do well on it.
   - His professor suggests that he do something to raise his grade, such as get a tutor or a study partner to help him.
   - His professor suggests that he consider dropping the course.

EXERCISE 3.9.A (p. 343)

1. Key points:
   - Hotel managers are responsible for the overall operation of the hotel and for seeing that guests receive good service.
   - The general manager is the top executive in a hotel. The general manager directs the work of other managers in the hotel. General managers must be skilled in leadership and financial decision making.
   - Hotel controllers are responsible for the management of money. Controllers manage the accounting and payroll departments, find ways to improve efficiency, and interpret financial statements.
   - Sales managers market the services of the hotel. Sales managers have constant contact with customers and know what selling points appeal to the public. Sales managers must be skilled in business, marketing, and advertising.
2. Key points:
   - Two features of the earth's surface that influence climate are ocean currents and landforms.
   - There are two large, circular ocean currents, one in each hemisphere. These currents move warm water from the equator to the north and south.
   - Warm and cold ocean currents affect the climates of nearby coastal areas; for example, the Gulf Stream warms the climate of northwestern Europe.
   - Landforms such as mountains affect climate. Mountains are cooler, windier, and wetter than valleys; one example is Mount Kilimanjaro, which is near the equator but always covered with snow.
   - Mountains interrupt the flow of winds and storms. When moist winds blow toward mountains, the air on the slope facing the wind is cool and moist, causing rain and snow to fall there. The air on the other side of the mountain is warmer and drier.
3. Key points:
   - One traditional belief about trees is the concept of a great cosmic tree, or Tree of the World. The Norse and Algonquin people honored the ash tree as the cosmic tree.
   - Another belief is that carrying the seeds of the buckeye tree would prevent a disease of the bones.
   - Another belief is that a water dowser can find water underground by using a branch from the hazel tree.
   - People have thought of trees as special because they provide many of life's necessities, such as food, oils, building materials, medicines, spices, and dyes.
4. Key points:
   - One physical difference between water and land is that oxygen is more abundant in air than in water. Land animals can get oxygen more easily than water animals can, but first land animals had to evolve lungs.
   - Another physical difference is that air is less dense than water and provides less support against gravity than water does. Therefore, land animals had to develop strong legs and a stronger skeleton for moving in air.
   - Another difference is that the temperature of the air on land changes more easily than it does in water. Therefore, land animals had to develop strategies to survive in warm and cold temperatures, such as the ability to maintain a constant body temperature.
5. Key points:
   - The Flatiron Building was the first true skyscraper in New York. It is an office tower that stands apart from other buildings on all sides.
   - The Flatiron Building is twenty–two stories tall, has a steel frame covered on the outside with stone, and is decorated with geometric patterns, columns, arches, and a crown of carved stone.
   - The Flatiron Building is built on an irregular, triangle–shaped site, giving it an unusual shape.
   - The building got its name from a joke about its shape. People thought it looked like a flatiron, a triangle–shaped piece of iron used for pressing clothes.

EXERCISE 3.10.A (p. 350)

1. Answers will vary, but may include the following: *Agents of socialization are people…who teach you how to live; Parents take care of you and teach the correct way to behave; Your friends influence you…; Also, teachers are important because they teach you knowledge; Television and the Internet…also influence an individual and teach socialization.*
2. Answers will vary, but may include the following: parents teach you how to live; parents teach you how to behave correctly; parents help you make right choices in life; peers influence how you dress; teachers give you knowledge; television and the Internet teach socialization.
3. Answers will vary, but may include *for example*, *and*, *because*, and *also*.
4. Yes.
5. The response would receive a score of 4.

EXERCISE 3.10.B (p. 351)

1. Yes.
2. Answers will vary, but may include the following: her roommate uses her things without permission; her roommate never cleans the bathroom; she should discuss the problem with her roommate, ask the apartment manager to help, or find another apartment.
3. Yes. The student's opinion is *I think the woman should find another apartment*. The reason given is *I think this because I had the same problem.*
4. Answers will vary, but may include *because*, *but*, *also*, *so*, and *another suggestion*.
5. Yes.
6. The response would receive a score of 4.

QUIZ 4 (p. 353)

1. Key points:
   - •The university is having a free career workshop for all students.
   - •The man's opinion is that the woman should attend the career workshop.
   - •One reason he gives is that there will be several people to talk to about working in her field.
   - •Another reason is that the university has only one career workshop each year and she shouldn't miss it.
   - •Another reason is that the workshop is a good way to start looking for a job after graduation.
2. Key points:
   - •The study showed that sleep improved the ability of students to retain knowledge about speech produced by a computer. This supports the belief that sleep has an impact on higher–level learning, such as the ability to learn language.
   - •In the study, a group of students was trained in the morning and tested twelve hours later. They had forgotten much of what they had learned; however, when they were allowed a night's sleep and retested the next morning, their test scores had improved.
   - •The study supports the belief that sleep protects memories against later interference or loss and also appears to restore memories.
3. Key points:
   - •The woman's problem is that she has two midterms on Monday but will have little time to study that weekend because her parents are coming to visit.
   - •The man suggests that she join his biology study group to review for the midterm.
   - •He suggests that she explain to her parents that she has to study for examinations.
   - •He suggests that she give her parents a list of places to go during the afternoon and then spend the evening with them.
4. Key points:
   - •Humans have more than one hundred separate gestures and facial expressions that are nonverbal signals in communication.
   - •Body language communicates how people perceive a social situation; for example, strangers meeting at a party will lift their eyebrows to communicate friendly feelings.
   - •Hand or arm gestures, such as a salute or a handshake, signal involvement.
   - •Eye movement and eye contact are used to regulate the rhythm of conversation. In Western society, friends look at each other often during conversation. A speaker looks away to signal his intention to speak; a listener looks at the speaker and nods his head to signal his interest and attention.
   - •The smile has a tremendous power to generate friendly feelings. The smile has the same meaning in every culture and is first seen in babies when they are very young.

QUIZ 5 (p. 356)

1. Key points:
   - •The man will be taking a writing course that includes a peer feedback group.
   - •The man does not want to attend the peer feedback group.
   - •One reason he gives is that he was in a student writing group before, but it didn't help with his writing.
   - •Another reason is that he can't learn from other students if they don't know how to write.
   - •Another reason is that he can learn better from a teacher because a teacher has more education and experience.
2. Key points:
   - •A cohort is a group of people who were born within a narrow band of years and move through history together.
   - •Historical events influence each cohort differently because each cohort is at a different age.
   - •The Great Depression had different effects on people who were young children and teenagers at the time.
   - •People who were young children during the Great Depression showed negative effects later in life because they had spent a greater portion of their childhood under economic hardship.
   - •People who were teenagers during the Great Depression did not show negative effects later in life.
3. Key points:
   - •The woman's problem is that she has to drive to school and needs to park on campus, but the parking lots are not big enough, and a parking permit does not guarantee a space.
   - •The man suggests that she register for classes that meet in the afternoon because the parking lots are less full in the afternoon.
   - •The man suggests that she park in the park–and–ride lot a mile from campus and ride the free shuttle bus from there to campus.

4. Key points:
   - Organizational charts reveal an organization's management structure: who is in charge of what, who reports to whom, and how information flows.
   - The pyramid chart shows the formal structure of a company, with the labor force on the bottom and management on the top. The pyramid structure defines the chain of command. Information flows up the chain, and orders flow down.
   - The wheel chart shows management as the hub, the departments as the spokes, and the labor force as the rim. Information flows up through the spokes to the hub. The wheel reveals a policy of open communication.

QUIZ 6 (p. 359)

1. Key points:
   - The university needs students to work as volunteers during an upcoming conference.
   - The woman's opinion about volunteering is that it will be a great opportunity to be a part of the conference.
   - One reason she gives is that volunteers can go to the reception and meet a lot of prominent scientists from around the world.
   - Another reason is to learn how a conference is organized, which interests her because she plans to be involved in environmental issues.
   - Another reason is to get a free T-shirt.
2. Key points:
   - One variation on the chase film featured a wealthy man who advertises for a wife and ends up being chased by a crowd of women.
   - Another variation was the comedy police chase, in which clownish policemen chase villains and bank robbers.
   - The chase film was popular because it was humorous, simple to tell, and simple for the audience to follow.
   - The chase film was important in the history of film because making the films was a valuable exercise in film style and led to certain filmmaking conventions.
3. Key points:
   - The man's problem is that he plans to transfer to the university in the fall, but he still needs a humanities course to complete his basic requirements.
   - His adviser suggests that he take a literature course that summer to meet the requirement, but the man wants to go sailing instead.
   - His adviser suggests that he decide whether going sailing or going to the university is more important.
   - His adviser suggests that he discuss the problem with his family and his friend.
4. Key points:
   - Immunization works by strengthening the immune system against a specific disease in a much safer way than the disease process itself.
   - Vaccines cause the body to produce antibodies against certain bacteria and viruses.
   - Vaccines against bacterial diseases were developed after researchers discovered how to isolate bacteria and grow them in the laboratory; this led to vaccines against typhoid, cholera, tetanus, and tuberculosis.
   - Vaccines against viruses were developed for smallpox, rabies, yellow fever, polio, and measles.
   - Researchers developed the polio vaccine by cultivating viruses in the laboratory using animal tissues such as eggs.

QUIZ 7 (p. 362)

1. Answers will vary.
2. Answers will vary.
3. Key points:
   - The dean's office has proposed limiting the student course load to 20 credit hours per semester.
   - The woman does not like the idea of limiting students to 20 credits per semester.
   - One reason she gives is that twice she has taken more than 20 credits and did not have any problem finishing the work.
   - Another reason is that she needs only 21 more credits to graduate and hopes to graduate this spring.
   - Another reason is that if she has to take a class this summer, she will have to pay more tuition, and she does not want to ask her family for more money.
4. Key points:
   - Forest fires and volcanic eruptions are both factors in climate change.
   - Forest fires send chemicals into the air that might affect atmospheric chemistry in a manner similar to the effect of chemicals from volcanic eruptions.
   - Like the ash from volcanic eruptions, the smoke from forest fires spreads over large areas and can reach the upper atmosphere.
   - Unlike volcanic eruptions, outbreaks of forest fire can be controlled and reduced.
5. Key points:
   - The man's problem is that he has trouble remembering the material from class, and he can't understand his notes when he looks at them later.
   - The professor suggests that he review his lecture notes as soon as possible after class, when the material is still fresh in his mind.
   - The professor suggests that he take a short nap or get a good night's sleep after studying because sleeping will help him remember what he just studied.
6. Key points:
   - One way that manufacturers sell goods to consumers is direct sales. Direct sales take place in the customer's home or in a business setting. Examples are door-to-door sales, catalog shopping, telemarketing, and Internet shopping.
   - Another way to sell goods is retail sales, which take place in stores. Examples are department stores, discount chains, supermarkets, hardware stores, car dealerships, drugstores, and convenience stores. Retail stores are a convenient way for consumers to buy.
   - Another way to sell goods is wholesaling, where goods are sold at lower prices because customers buy in large quantities or in a low overhead setting. Examples are outlet stores and selling to retail stores. Wholesaling is the most practical method for the widespread distribution of goods.

QUIZ 8 (p. 366)

1. Answers will vary.
2. Answers will vary.
3. Key points:
   - One view of the counselor is that if an essay is required for a scholarship application, students should start writing it far in advance of the deadline because they will go crazy if they wait until the last minute.
   - Another view is that if an essay is not required, students should write one anyway because it will help the scholarship committee understand them more and may improve their chance of winning the scholarship.
   - Another view is that students should ask for recommendations from people who know them as an individual because the writers will be able to create a more complete picture of them.
   - Another view is that if recommendations are not required, students should get one or two anyway because they might be useful for future applications.
4. Key points:
   - The emergent quality of crowd behavior is the possibility that several different outcomes could emerge from the situation.
   - Expressive crowds show strong emotions, which can be either positive or negative; when emotions get out of hand, the crowd becomes out of control.
   - Demonstrations have rules of behavior but also an emergent aspect that makes them unpredictable.
   - Crowds have an emergent quality because there is a lack of certainty about what to do, which leads to a particular mood and a breaking of the rules.
5. Key points:
   - The woman's situation is that she has too much work to do. She has forty student papers to grade, and she also has to write a term paper and study for a big test.
   - The man suggests that she ask Doctor Carter for more time to grade the papers.
   - The man suggests that she ask her biology professor for more time to write her term paper.
   - The man suggests that she try her best to get all her work done by grading the student papers first and setting a time limit for each one.
6. Key points:
   - Sunlight provides the energy that drives ecosystems. Plants use sunlight directly in photosynthesis. The length of daylight is a signal for seasonal events such as the flowering of plants and the migration of birds.
   - Rainfall and temperature affect the plant community, which determines the availability of food, nest sites, and shelter for animals. Air temperature affects biological processes and the ability of organisms to regulate their body temperature.
   - Wind increases the effects of air temperature on organisms by increasing heat loss (wind chill). Wind causes water loss in animals and plants.
   - Rocks and soil limit the populations of plants and the animals that eat plants. Rocks and soil contribute to the irregular distribution of plants and animals in ecosystems.

PART 4 – WRITING

EXERCISE 4.1.A (p. 380)

Key points:
- Causes of corneal injuries include being hit in the eye and getting chemicals in the eye.
- Causes of corneal ulcers include injury, chronic dryness, infection, and nutritional deficiency.
- The injury called keratitis can result from wearing hard contact lenses for too long or by overexposure to ultraviolet light.
- Consequences include eye pain, sensitivity to light, bloodshot eyes, inflammation, scar tissue, and vision problems.
- Treatments include antibiotic ointment or drops, artificial tears, and wearing an eye patch.

EXERCISE 4.1.B (p. 381)

Key points:
- Tree topping creates more problems than it solves and is therefore not a good pruning practice.
- Topping speeds up the growth rate of branches; this is not a good pruning practice because it creates many weak branches instead of a few healthy ones.
- Topping is stressful for the tree and increases the risk of infection by diseases and insects; this is not a good pruning practice because the purpose of pruning is to improve the tree's health.
- Topping removes too many leaves, which are the tree's food source; this is not a good pruning practice because the tree might starve.
- Topping destroys the natural shape of the tree; this is not a good pruning practice because the purpose of pruning is to enhance the natural shape and beauty of the tree.

EXERCISE 4.2.A (p. 385)

Key points:
- The International style dominated the architecture of the modern city; this agrees with the points in the reading that the style reshaped the city and was one of the most successful architectural movements in history.
- The International style takes simplicity and "form follows function" to an extreme, leading to office buildings that are ugly, ridiculous, cheap, vulgar, and boring; this disagrees with the point in the reading that utilitarian simplicity is beautiful and elegant.
- The International style received much negative criticism from architects and the public; this disagrees with the point in the reading that the style inspired both architects and ordinary citizens.

EXERCISE 4.2.B (p. 386)

Key points:
- Past uses of geothermal energy include using hot water for bathing and cleansing, to treat disease, to heat buildings, and to generate electricity.
- Present uses of geothermal energy include the generation of electricity and the direct use of hot water for industrial processes, to heat buildings and greenhouses, and to supply heated mineral water for health resorts.
- Some regions have better potential for developing geothermal systems because they are geologically or volcanically active, the concentration of geothermal energy is very high, and geothermal reservoirs exist close to the surface.

EXERCISE 4.3.A (p. 393)

Key points:

- Workers have social and personal needs that go beyond economic concerns; this supports the point in the reading that traditional economic incentives such as pay and promotions are near the bottom of the list of what workers consider important.
- The small work group fills important social and emotional needs of workers; this supports the point in the reading that workers consider social and personal features of the workplace to be important.
- Workers deserve to have a voice in the decisions that affect them; this supports the point in the reading that the most satisfying jobs are those with a high level of autonomy.
- Workers need security and community in the workplace; this supports the point in the reading that workers value social and personal features of the workplace.
- Workers feel angry and alienated when they have no voice; this supports the point in the reading that alienation is a sense of powerlessness.

EXERCISE 4.3.B (p. 394)

Key points:

- Phrenology is no longer thought of as a real science; this refutes the point in the reading that many leading scientists supported its basic principles and attempted to advance it as a science.
- The size and shape of the skull is not a precise measure of a person's intellect or of the function of the brain; this refutes the point in the reading that, according to phrenology, the size and shape of the skull can determine a person's character and intellect.
- Different parts of the brain control distinct functions; this supports the point in the reading that the various mental processes are centered in specific parts of the brain.
- Humans have several different forms of mental powers, or multiple forms of intelligence; this supports the point in the reading where Gall claimed that humans had several different forms of power for each mental process (37 different mental powers).

EXERCISE 4.3.C (p. 395)

Key points:

- Méliès developed the special effect of stop action; this illustrates the point in the reading that Méliès realized that film could be manipulated in countless ways.
- Méliès introduced animation in *A Trip to the Moon*; this illustrates the point in the reading that Méliès saw film's possibilities for trickery and special effects.
- Méliès realized that scenes could be staged for the camera with the aid of scenery and costumes; this illustrates the point in the reading that Méliès transformed the cinema into a storytelling medium.
- Méliès extended the length of films by putting several scenes together; this illustrates the point in the reading that Méliès made longer films.

EXERCISE 4.4.A (p. 399)

1. The speaker talks about a maple tree that was topped. This is not a good pruning practice because topping causes a lot of damage to trees. The first reason is topping causes leaves and branches to grow fast. The growth rate of a tree speeds up when it is topped. Branches become crowded and dangerous and could crush a car. Another reason is topping removes too many leaves, which are the tree's food source. The tree will starve, and it is also more likely to be infected by disease. Topping causes a lot of stress for the tree; therefore, it is not a good pruning practice.

2. In the past, people used geothermal energy in several ways. Some examples are hot springs for bathing, treating disease, and heating buildings. Different tribes in North America called hot springs places of peace, where everybody could share the hot water for bathing. In European history, the Romans also used the water of hot springs for its healing power in eye and skin diseases. Geothermal energy was also used to heat homes in Rome and other places that were geologically active.

3. The professor made many points about the motivation and needs of workers that support points made in the reading. First, the professor said that the small work group, about 3 to 15 people with one leader, is important for workers. The work group fills needs of workers because they can participate and have a sense of respect. The small work group also gives workers the ability to make decisions. This point agrees with the reading, which said the most satisfying jobs are those with a high level of autonomy. This gives workers a voice so they can make their own decisions.

EXERCISE 4.5.A (p. 403)

Response A: Score: 5

The response effectively conveys relevant information from the lecture, including the following key points:

- Bacteria started becoming resistant to antibiotics soon after hospitals started using them regularly, increasing the risk of hospital infections; this differs from the point in the reading that antibiotics are "wonder drugs" that save lives.
- Bacteria became resistant to some antibiotics by evolving weapons against them; this differs from the point in the reading that antibiotics are powerful weapons against disease.
- A few cells of bacteria will survive an antibiotic, leading to new resistant strains; this differs from the point in the reading that antibiotics are "wonder drugs."
- One consequence of antibiotic resistance is the reappearance of dangerous diseases such as tuberculosis; this differs from the point in the reading that antibiotics reduced the number of deaths from tuberculosis.

The response accurately relates information from the lecture to that in the reading. It is well organized and coherent and contains only minor language errors.

Response B: Score: 3

The response contains some relevant information from the lecture, but some points are incomplete, inaccurate, or vague, particularly in the second and third paragraphs. The response contains errors of grammar and usage that result in vagueness of some content.

Response C: Score: 1
The response contains little relevant content from the lecture. It includes some information from the reading, but fails to connect points from the lecture and reading. It contains numerous language errors, such as run–on sentences and incorrect word forms, which greatly obscure meaning.

Response D: Score: 4
The response generally conveys relevant information from the lecture. It is generally good in relating information from the lecture to that in the reading, but some points are vague. The response is generally well organized. The grammar is generally accurate, but some minor language errors result in occasional lack of clarity.

Response E: Score: 2
The response contains some relevant information from the lecture but has significant omissions, such as an explanation of how bacteria became resistant to antibiotics. It contains language errors, such as incomplete sentences and incorrect word forms, which largely obscure the meaning of key ideas.

QUIZ 1 (p. 407)

Key points:

- Scientists have always had a problem coming up with a reasonable definition of self–awareness; this contradicts the point in the reading that self–awareness is the same as self–recognition.
- Further use of the mark test with chimpanzees produced results that were inconsistent; this contradicts the point in the reading that the chimpanzees on average touched the marked spots seven times in a half–hour.
- All chimpanzees touch their heads and faces a lot; this contradicts the point in the reading that the chimpanzees touched the marked spots more often when the mirror was present.
- Some of the behaviors we call self–aware are also social responses that chimpanzees show in the presence of another chimpanzee; this contradicts the point in the reading that chimpanzees are self–aware because they are able to recognize the image in the mirror as their own.

QUIZ 2 (p. 408)

Key points:

- An advantage of wind power is that it is a clean source of energy; this agrees with the point in the reading that wind power is clean, safe, and environmentally friendly.
- An advantage is that wind power is getting affordable enough to compete with inexpensive coal and oil; this agrees with the point in the reading that wind power is a promising energy resource that can serve as an alternative to electricity generated by fossil fuels.
- A disadvantage is that wind power would require large numbers of wind generators and large amounts of land to produce heat or electricity in useful amounts; this departs from the point in the reading that wind turbines could provide 20 percent of the electricity if they were installed on less than one percent of the land area in the United States.
- A disadvantage is that wind turbines kill a large number of birds; this departs from the point in the reading that wind power is safe and environmentally friendly.

QUIZ 3 (p. 409)

Key points:

- Malthus predicted that the amount of food per person would decline as population increased, but his theory had several flaws.
- Malthus never predicted that advances in technology would greatly increase food production; this contradicts the point in the reading that food production tends to increase at an arithmetic rate.
- Malthus overlooked education and birth control as ways to lower population growth; this contradicts the point in the reading that the only checks on population growth are a limited food supply, disease, famine, and war.

EXERCISE 4.7.A (p. 419)

1. The question has two parts. The first part asks you to state whether you agree or disagree with the given statement. The second part asks you to support your opinion with specific reasons and examples.
2. Yes.
3. The essay is organized into an introduction, a body, and a conclusion. The two body paragraphs develop the two supporting points.
4. In the introduction, the writer states the thesis and previews the supporting points.
5. *It does not cost money to experience the best things in life: enjoying nature and being with our friends and family.*
6. The writer supports the thesis with two supporting points, which are developed in the body paragraphs with examples, reasons, and personal experience.
7. Body paragraph 1: *We can relax and enjoy the beauty of nature without spending money.* Body paragraph 2: *It does not cost money to spend time with our friends and family.*
8. Answers will vary, but may include the following: walking in the park; looking at the leaves; watching the snow falling; listening to the birds; having a garden; visiting friends; going to the library; reading; and spending time with family. Their purpose is to support and develop the thesis.
9. In the conclusion, the writer restates the thesis.
10. Answers will vary.

EXERCISE 4.8.A (p. 425)

1. The question asks you to do two things: (1) state your position on the given topic, and (2) support your choice with specific reasons and examples.
2. In the introduction, the writer restates the question and states the thesis of the essay.
3. *I prefer to learn by doing things because when I do something myself it becomes more real than when I read about it.*
4. The essay is organized into an introduction, a body, and a conclusion. The three body paragraphs develop the three supporting points.
5. Body paragraph 1: I *learned how to ride a bicycle and drive a car by experience.* Body paragraph 2: *Learning mathematics is another example of learning by doing things.* Body paragraph 3: *Finally, I learned how to use a computer by doing it.*
6. Answers will vary.
7. Answers will vary, but may include *or, because, and, also, similarly, although, another example, therefore, finally, but, however,* and *such as*.
8. Answers will vary.

EXERCISE 4.9.A (p. 430)

1. I decided not to get married two years ago so I could finish my university studies. My father wanted me to get married, but my parents allowed me to decide. If I had married, I would have had to stay in my husband's home because in my culture, a married woman has a duty to her husband. It is our tradition. I chose to finish my degree instead. I will be a graduate student in Toronto, where I will earn my master's degree in business economics.

2. I think students should have several short vacations throughout the year instead of one long vacation because they work hard and need breaks often. Students in my country have several short holidays during every season. In contrast, American students have one long vacation in the summer. I read a paper saying that American students forget what they learn because of the long vacation. This is why I believe several short vacations are better than one long vacation.

3. There are many advantages in having friends that are different from me. For example, my friend from Turkey teaches me a lot about his culture. His family is very big, and my family is not big, so I like to go to his house to visit his family. I enjoy the good food and the conversation because it is really wonderful and interesting. Another friend is an artist who paints pictures and creates other art that is very good. My artist friend is not like me, and I learn interesting things about art from him.

EXERCISE 4.9.B (p. 431)

There are mainly two kinds of occupations. Some occupations require you to work primarily with machines, while others require you to work with other people. My job is working with machines, especially computers, so I prefer this kind of occupation.

Computers are important in our society. I am a computer programmer at a medical university, and I like to solve the problems of the medical record system. Computers have improved business, research, education, and many other fields of study. Many occupations require specialization in computers, so people need specialized training in an area of computer operations.

On the other hand, in some occupations you work mainly with people. This is also necessary for my job because I work on a team with two other people. Therefore, we must help each other solve problems.

In conclusion, I prefer working with machines because machines need people to operate them, and machines improve people's lives. Many occupations, such as computer programmer, require specialization but also the ability to communicate with other people. Therefore, I believe that working with both machines and people is the best kind of job.

EXERCISE 4.10.A (p. 436)

Response A: Score: 5
The essay effectively addresses the task by clearly stating the thesis. It is well organized and well developed with appropriate reasons and examples. The essay has unity and coherence, with appropriate use of transitions. There are only occasional minor language errors.

Response B: Score: 4
The essay addresses the task well, although the point in paragraph 3 is not fully elaborated. The thesis is clearly stated, and the essay is generally well organized and sufficiently developed. The essay has unity and coherence, with appropriate use of transitions, but there are noticeable minor language errors.

Response C: Score: 1
The essay is seriously disorganized and underdeveloped. The thesis is not clear, and the essay contains little detail that is relevant to the task.

Response D: Score: 2
The essay displays limited development in response to the task. The thesis is stated, but there is little organization. There are few connections among ideas to support the thesis. The essay also contains an accumulation of errors in grammar and usage.

Response E: Score: 3
The essay addresses the task by stating a thesis and developing it with some reasons and examples. There is some use of transitions, but connections among ideas are occasionally unclear. The essay contains errors in grammar and a limited range of sentence structures.

QUIZ 7 (p. 442)

Key points:

- A pictorial photograph is one with a successful composition; this illustrates the point in the reading that a pictorial photograph stands on its own as a valuable work of art.
- The important elements of composition are balance, placement, color, and detail; these illustrate the point in the reading that the rules of composition are guidelines that can help the beginning photographer.
- Everything in a photograph is an essential part of the composition, as imagined in a picture of a house on a cliff above the sea. This illustrates the point in the reading that composition is the organization of forms and colors within the frame of the picture.

QUIZ 8 (p. 444)

Key points:

- A child's choice of toys is a natural occurrence, not an example of sexist social conditioning; this disagrees with the point in the reading that boys and girls are taught gender "rules" through social conditioning.
- Younger children of both sexes play with both dolls and trucks; this disagrees with the point in the reading that toys are tools that condition children to learn gender roles and accept these roles as normal.
- Around age five, most children will say that a certain toy is either for girls or for boys; this agrees with the point in the reading that clearly separate classes of toys exist for girls and boys.
- Most boys and girls are naturally drawn to different types of toys, no matter what their parents and society teach them; this disagrees with the point in the reading that children learn their culture's gender rules from adults, media images, and the toys they are given to play with.

TEST 1

READING (p. 447)

1. C Clues: *For theater, it is a story performed by actors on a stage; The basic encounter in theater is between the performers and the audience.* (1.1)
2. B Clues: *...there is an important difference between the two forms. Unlike a novel, a play is written to be performed, and the script of a play...is an outline for a performance.* (1.1)
3. D *This combination of elements* is paraphrased in *the way it joins characters and audience in the telling of a story. Distinguishes theater from other art forms* is paraphrased in *Theater is a distinct art form.* (1.7)
4. B The author's purpose is to give an example of a play in which abstract ideas are characters. Clues: *...even when the performers play animals, objects, or abstract ideas. In the medieval play -----, some of the roles are abstract ideas....* (1.6)
5. B The referent of *theme* is something that is universal to humans. The sentence introduces the idea of death arriving before we want it to come. Logic tells you that *theme* refers to *death arriving before we want it to come.* (1.3)
6. C *Urge* means *motivation* in this context. Clues: *...the impulse toward theater is universal. Every human society has the motivation to create theater.* (1.4)
7. A *Realm* means *form* in this context. Clues: *...developed into a separate ----- of theater; ...theater has become a separate art form....* (1.4)
8. D You can infer that theater emerged as a distinct art form at different times around the world. Clues: *At various times, these ceremonies and stories developed into a separate realm of theater; In Greece...almost 2,500 years ago; In India...around 2,000 years ago.* (1.5)
9. A *Transitory* means *temporary* in this context. Clues: *In the theater, we live in the perpetual present tense; A performance changes from moment to moment...; Theater occurs through time...*; the prefix *trans–* = across. (1.4)
10. C Clues: *The performing arts...are not objects but events. Theater occurs through time....* (1.1)
11. B The passage does not state that the medium of theater is written language; that is the medium of literature. All the other answers are given: *...theater is universal—there is an impulse toward creating theater in all societies; This combination of elements distinguishes theater from other art forms; The focus of drama is on human beings....* (1.2)
12. D In the added sentence, *Thus* is a transition that shows result. It links the idea that *a story...is presented by one group...to another group* in the previous sentence with the idea that *theater is a shared event* that includes *those who perform and those who observe* in the added sentence. (1.8)
13–14. B, D, F Key information: *...a story performed by actors on a stage...The basic encounter in theater is between the performers and the audience...the characters are part of a human story...; ...theater is universal—there is an impulse toward creating theater in all societies...The urge to create drama has existed wherever human society has developed...; Theater is a transitory art. A performance changes from moment to moment, and each moment is a direct, immediate adventure for the audience.* Answers (A) and (E) are minor ideas; answer (C) is not mentioned. (1.9)
15. A *Suspended* means *hanging* in this context. Clues: *A cloud...in the atmosphere above the earth's surface...*; the prefix *sus–* = below. (1.4)
16. C *Laboratory studies have demonstrated* is paraphrased in *Research shows. In clean air—air free of dust and other particles—condensation or deposition of water vapor* is paraphrased in *the formation of clouds in clean air. Requires supersaturated conditions, that is, a relative humidity greater than 100 percent* is paraphrased in *depends on a relative humidity of over 100 percent.* (1.7)
17. D Clues: *...dew point, the temperature at which the invisible water vapor in the air condenses....* (1.1)
18. A The author's purpose is to identify the inventor of our system for classifying clouds. Clues: *...among the first to devise a system for grouping clouds; ...the essentials of Howard's classification scheme are still in use today.* (1.6)
19. B The referent of *Those* is something that has vertical development. The subject of the previous two sentences is *clouds*. Logic tells you that *Those* refers to *clouds*. (1.3)
20. C Cumulus clouds are not characterized by stable air; that is a characteristic of stratus clouds. All the other answers are characteristics of cumulus clouds: *...the base is...roughly horizontal; ...capped with a cauliflower–like dome...; Low–level cumulus clouds....* (1.2)
21. A *Sharp* means *distinct* in this context. Clues: *...detached from one another...; ...well–defined bases....* (1.4)
22. D You can infer that stratus clouds differ from cumulus clouds in appearance. Clues: *Cumulus clouds occur as heaps or puffs, stratus clouds are layered...; Stratus, or layered, clouds grow from top to bottom in wide sheets...; ...like a formless blanket....* (1.5)
23. B Clues: *...cirrus clouds look like threads; Cirrus clouds are detached clouds that take the form of delicate white filaments, strands, or hooks; ...bands of threadlike cirrus clouds...spread across the entire sky.* (1.1)
24. C *Fibrous* means *threadlike* in this context. Clues: *...cirrus clouds look like threads; ....take the form of delicate white filaments, strands...; ...bands of threadlike cirrus clouds...; ...streamers....* (1.4)
25. D In the added sentence, *These strands* refers to *feathery strands called "mares' tails"* in the previous sentence. (1.8)

26–28. C, E, G Heaped clouds: *...they often develop vertically in the form of rising puffs, mounds, domes, or towers; ...heaped clouds, resulting from rising unstable air currents...; ...white, heaped clouds capped with a cauliflower–like dome...The sunlit parts are brilliant white; the base is relatively dark and roughly horizontal.*

A, F Layered clouds: *...layered clouds, resulting from stable air...The air is stable, with little or no convection present; These clouds spread laterally to form layers that sometimes cover the entire sky...like a formless blanket.* Answer (B) describes raindrops; answer (D) describes cirrus clouds. (1.10)

29. A *Shoals* means *shallows* in this context. Clues: *...a series of shallow areas....* (1.4)

30. B Clues: *...the Grand Banks...where the warm waters of the Gulf Stream meet the cold waters of the Labrador Current. As the currents brush each other....* (1.1)

31. B *This rich environment* is paraphrased in *The Grand Banks...favorable natural conditions. Has produced cod by the millions and once had a greater density of cod than anywhere else on Earth* is paraphrased in *used to have the world's largest concentration of cod.* (1.7)

32. D The referent of *the region* is someplace where settlers used to think the only sea creature worth talking about was cod. The previous two sentences and the following sentence discuss the cod fishery in Newfoundland. Logic tells you that *the region* refers to *Newfoundland.* (1.3)

33. C The author's purpose is to stress the economic and cultural significance of cod. Clues: *...the entire Newfoundland economy was based on...catching fish...; ...the only sea creature worth talking about was cod...; ...a pudding whose main ingredient was cod.* (1.6)

34. C The passage does not state that fishers competed with farmers for natural resources. All the other answers are given: *...controlled by merchants based in the capital...This system kept the fishers in a continuous state of debt and dependence on the merchants; ...the entire Newfoundland economy was based on Europeans arriving, catching fish... and then taking fish back to European markets; Cod laid out to dry on wooden "flakes"....* (1.2)

35. C *Replenish* means *restock* in this context. Clues: *...fishers believed in the cod's ability to ----- itself and thought that overfishing was impossible*; the prefix *re–* = again. (1.4)

36. A Clues: *Until the twentieth century, fishers...thought that overfishing was impossible. However, Newfoundland's cod fishery began to show signs of trouble during the 1930s, when cod failed to support the fishers and thousands were unemployed.* (1.1)

37. A Clues: *...when an international agreement in 1977 established the 200–mile offshore fishing limit, the Canadian government decided to build up the modern Grand Banks fleet and make fishing a viable economic base for Newfoundland again.* (1.1)

38. D *Commanding* means *receiving* in this context. Clues: *...the conglomerate was prospering, and cod were ----- excellent prices in the market.* (1.4)

39. B You can infer that the author believes it may be a long time before cod stocks recover from overfishing. Clues: *Today, cod stocks are at historically low levels and show no signs of imminent recovery...; ...no one can predict whether and when the cod will return to the Grand Banks.* (1.5)

40. A In the added sentence, *They* refers to *inshore fishermen*, the main subject of the previous sentence. The added sentence develops the idea of *catches dropping off*, mentioned in the previous sentence, by discussing a possible reason for this. (1.8)

41–42. A, C, E Key information: *This rich environment has produced cod by the millions and once had a greater density of cod than anywhere else on Earth; Until the twentieth century, fishers believed in the cod's ability to replenish itself and thought that overfishing was impossible...Newfoundland's cod fishery began to show signs of trouble...when cod failed to support the fishers...; Today, cod stocks are at historically low levels and show no signs of imminent recovery, even after drastic conservation measures and severely limited fishing.* Answers (B) and (D) are minor ideas; answer (F) is not mentioned. (1.9)

LISTENING (p. 460)

1. D The woman is requesting an interview with the dean. The woman says: *Our class is doing a radio program, and we'll have interviews with a lot of people from all parts of campus life. We'd like to interview the new Dean of Students, if he's willing.* (2.3)

2. C The man's purpose is to let the woman know that the dean is very busy and that his schedule is already full. (2.3)

3. A The woman says: *I hope Dean Evans will agree to meet with us.... It would be a way for the whole community to get to know him, get to know his ideas and everything...like the kind of vision he has for the university.* (2.2)

4. B The woman says: *This will be a great way for everyone to learn about our new dean.* You can infer that the dean has been dean for only a short time. (2.4)

5. C The meeting will take place in two weeks, the week after next week. The man says: *...it looks like he's got a lot of meetings this week, and, well, most of next week, too. What about the week after that?* The woman says: *Um, yeah, I think so.* (2.2)

6. B The students are mainly discussing the concept of opportunity cost. The woman says: *Let's start with "opportunity cost."* The man says: *Opportunity cost—that's when...; You have an opportunity cost when....; This is the opportunity cost....* (2.1)

7. A The man illustrates the concept with an example. The man says: *Say you want to have your own business, so you, so you open a restaurant.* He then explains how the concept of opportunity cost applies in the restaurant example. (2.1)

8. C The man's purpose is to suggest that the restaurant's profit is less than it seems because of the opportunity cost. (2.3)

9. D The man says: *...an economist tries to look at all the factors, all the costs; An economist's definition of costs is broader than an accountant's.* (2.2)
10. A The woman says: *...it's more than what we pay for tuition and books! We have to subtract the income we lose by not working full time.* You can infer that the true cost of a college education includes the cost of lost income. (2.4)
11. A The professor says: *The eruption cycle had sort of a harmless beginning. In March of 1980, seismologists picked up signs of earthquake activity below the mountain. And during the next week, the earthquakes increased rapidly, causing several avalanches.* (2.2)
12. C The professor's purpose is to show that the eruptions interested a lot of people, including tourists and hikers who were not scientists. (2.3)
13. D The professor means that the small eruptions paused briefly just before the major eruption. There were a few days with no volcanic activity, and then the major eruption occurred. (2.4)
14. ✓ Yes: An earthquake caused a huge landslide: *The earthquake triggered a massive landslide that carried away huge quantities of rock.*
    ✓ No: The mountain gained sixty feet in height: Not supported by the information in the lecture.
    ✓ Yes: Ash and steam rose from the mountain: *...pouring out more ash, steam....*
    ✓ Yes: The mountain's side and top exploded: *...the north side of the mountain was blown away. Then, the top of the mountain went too....* (2.6)
15. B, C One effect of the eruption was that large numbers of animals and people were killed: *The blast killed the mountain's goats, millions of fish and birds, thousands of deer and elk—and around sixty people.* Another effect was that an ash cloud affected weather around the world: *The ash cloud drifted around the world, disrupting global weather patterns.* (2.2)
16. D The professor says: *...geologists who've studied the mountain believe she won't stay asleep forever. The Cascade Range is volcanically active. Future eruptions are certain and—unfortunately—we can't prevent them.* You can conclude that Mount St. Helens is likely to erupt in the future. (2.4)
17. C The speaker says: *When European explorers first approached the coast of North America, ...the first thing they noticed was the pungent aroma...; ...the agreeable smells didn't come from spices; they came from the lush vegetation of the North American forests.* (2.2)
18. A The speaker says: *Pine sap was a valuable commodity to the sailors who explored the coast; ...what were known as naval stores—pitch and pine tar; Sailors used naval stores for caulking and waterproofing their wooden ships, which kept them seaworthy.* (2.2)
19. C The speaker says: *The Native Americans already knew about the medicinal properties of the dogwood, and they used its bark and roots to treat malaria and other fevers; European settlers also used the dogwood to relieve attacks of malaria.* (2.2)
20. C The speaker wants the students to smell a piece of wood after scraping it with their thumbnail to release the scent. The speaker says: *I have a sassafras twig with me here, which I'll pass around so you can all enjoy its smell.* (2.3)
21. D The speaker says: *Other Native American tribes used sassafras tonic as a cure for everything from fever to stomachache; For centuries, sassafras enjoyed a fantastic reputation as a cure for almost every disease.* (2.2)
22. B The speaker says: *...sassafras has been banned for human consumption.* The speaker implies that sassafras is no longer a legal medicine. (2.4)
23. D The professor mainly discusses Plato's views on education. Key sentences: *Plato believed the state should take an active role in education...the state should create a curriculum that leads students from thinking about concrete information toward thinking about abstract ideas; Plato believed our most important goal was the search for truth.* (2.1)
24. B The professor's purpose is to give an example of a lasting truth. The professor says: *Plato believed the only true reality consists of ideas; For instance, the mathematical concept of two plus two equals four—this is an idea that's always existed.* (2.3)
25. A, C Idealists believe that higher–level thinking develops a person's character and benefits the whole society: *Higher–level thinking would develop the individual student's character, and thus ultimately benefit the larger society.* (2.2)
26. A The woman thinks that the idealist view of education does not give students useful knowledge. The woman says: *But isn't that kind of impractical? I mean, most of us go to college because we want knowledge about certain subjects, not the whole universe.* (2.3)
27. C The professor means that idealism has diminished in influence. The professor says: *...it's questions like this that have led to a weakening of idealism today. He says that developments in science and technology have changed our way of thinking about what is true.* (2.4)
28. B The professor says: *Critics of idealism would agree with you that "character development" comes at the expense of creativity, and that too much emphasis on traditional values can be harmful—if it makes students stop questioning what they're being taught.* (2.2)
29. D The professor says: *In physics, work means moving an object when there is some resistance to its movement. Every time we lift an object, push it, pull it, or carry it, we are doing work.* (2.2)
30. B The professor's purpose is to explain what happens when a moving object meets resistance. The plow meets resistance in the soil, requiring the tractor's engine to use more energy. (2.3)
31. ✓ Yes: Electricity can be converted to heat or light: *Energy comes in several different forms. It can take the form of heat, light, motion, electricity, chemical energy, nuclear energy, and so on. Energy can change forms....*
    ✓ Yes: The amount of energy in any system stays the same: *The law of conservation of energy tells us that the energy of any system...must balance out in the end. The amount of energy in the system is conserved....*
    ✓ No: Nuclear energy is regulated by international law: Not supported by the information in the talk. (2.4)

32. A, C A car changing chemical energy to motion illustrates the conversion of energy from one form to another: *Machines do work by converting one form of energy to another. For example, a car converts the chemical energy in gasoline to kinetic energy—to motion.* An electric stove converting electricity to heat is another illustration: *A stove converts electrical energy or chemical energy into heat energy that cooks our food.* (2.2)

33. D The professor's purpose is to show that both machines and living things need energy. Both must convert one form of energy to another in order to work. If there is no energy, the machine stops or the organism dies. (2.3)

34. C The professor says: *The first law of thermodynamics—conservation of energy—says the earth must end up with the same amount of energy it started out with. The energy changes forms, but no energy is lost or gained.* You can infer that in the earth as a whole system, no new energy is created, and no energy is destroyed. (2.4)

SPEAKING (p. 466)

1. Answers will vary.
2. Answers will vary.
3. Key points:
   - •The man is thinking of registering for an online course.
   - •The adviser's opinion about online courses is that they are not right for all students.
   - •One reason she gives is that online courses require students to be self–motivated and able to learn on their own, mainly by reading.
   - •Another reason is that online courses have a fairly high dropout rate.
   - •Another reason is that some students prefer going to class and interacting face–to–face with the professor and other students.
4. Key points:
   - •Corporations are similar to any other culture because they have values, norms, rituals, symbols, and texts.
   - •Corporate culture gives meaning to the daily activities of the company.
   - •Corporations have norms that regulate behavior, maintain order, and establish conventions such as clothing styles and business hours.
   - •Well–established companies have traditional corporate cultures.
   - •Many new technology firms have very informal cultures with no fixed traditions to follow.
5. Key points:
   - •The man's problem is that he is concerned about his grade for his geology course, but he does not have enough time to study because he has to work more hours at his job.
   - •The woman suggests that he get a tutor.
   - •The woman suggests that he quit his job or look for a different job.
   - •The woman suggests that he drop the geology course and take it again next quarter.
6. Key points:
   - •Ocean water is clear when there are no particles suspended in it, so light is able to pass through.
   - •Some water is green because of a mixture of blue light from scattered sunlight and yellow pigment from phytoplankton, the floating plant life.
   - •Some water is brown or brownish–red because of the presence of large quantities of brown algae, which contain brown pigments.
   - •Some water is blue because of the scattering of sunlight by tiny particles in the water; blue light is distributed easily because it has a short wavelength.

WRITING (p. 471)

1. Key points:
   - •The reasons for traveling have changed; in the past, peopled traveled for political or economic purposes; in modern times, people travel for personal enrichment and adventure. This is similar to the point in the reading that the earliest tourists traveled in search of resources, while later tourists traveled for cultural, educational, and scientific purposes.
   - •Hemingway illustrates the conquest ideal in tourism and was very influential. This is similar to the point in the reading that Hemingway exposed people to the possibilities of journeying to faraway lands for adventure.
   - •Ethnic tourism is a new kind of cultural tourism in which tourists learn about aboriginal cultures. This is similar to the point in the reading that young Europeans took "grand tours" to expand their cultural horizons; it also differs because the European example occurred in the seventeenth century rather than in the present.
   - •Environmental tourism is traveling to wilderness areas to observe, photograph, and learn about nature. This is similar to the point in the reading that people traveled to observe and preserve the natural world; it also differs from the point in the reading that people traveled to hunt and kill big game.

TEST 2

READING (p. 475)

1. B *Abolish* means *end* in this context. Clues: *...objected to slavery...; ...wanted to ----- the institution; ...Canada passed a law abolishing slavery and declared that any escaped slaves who came to Canada would be free citizens*; the prefix *ab–* = away. (1.4)
2. D Clues: *In 1793, Canada passed a law abolishing slavery and declared that any escaped slaves who came to Canada would be free citizens.* (1.1)
3. C The referent of *The term* is something that was first used in the 1830s. The previous sentence introduces the topic of the Underground Railroad and defines its meaning. Logic tells you that *The term* refers to *Underground Railroad.* (1.3)
4. D *Because the Underground Railroad was so secret* is paraphrased in *it was a secret organization. Few records exist that would reveal the true number of people who traveled it to freedom* is paraphrased in *We do not know exactly how many slaves escaped on the Underground Railroad.* (1.7)
5. C *Fugitives* means *runaways* in this context. Clues: *Runaway slaves...; ...hid in wagons...; ...traveled on foot...; ...escaped...* (1.4)
6. C The passage does not mention riding in a railcar as a method of escape on the Underground Railroad. All the other answers are mentioned: *The fugitives hid in wagons under loads of hay...; Boys disguised themselves as girls, and girls dressed as boys; ...twenty–eight slaves escaped by walking in a funeral procession....* (1.2)
7. B The author's purpose is to illustrate the secret nature of the escape network. Clues: *...the Underground Railroad was so secret...; ...developed its own language; ...elude the slave hunters; ...hiding places...; ...slaves who dared to run away and break for liberty.* (1.6)
8. A *Elude* means *avoid* in this context. Clues: *...backcountry roads that were used to ----- the slave hunters; ...hiding places....* The runaway slaves had to avoid being caught by the slave hunters. (1.4)
9. A Clues: *...the Underground Railroad, a loosely organized system whereby runaway slaves were passed from safe house to safe house as they fled northwards to free states or Canada.* (1.1)
10. C Clues: *...Harriet Tubman, a former slave who dedicated her life to helping other runaways. Tubman made 19 trips into the South to guide 300 relatives, friends, and strangers to freedom.* (1.1)
11. D You can infer that the author believes the railroad represented a psychological victory for abolitionists. Clues: *...the few thousand slaves who made their way to freedom in this way each year had a symbolic significance...; ...slavery in the United States was finally abolished in 1865.* (1.5)
12. A The added sentence adds the example of women and children escaping, which logically follows the example of young men given in the previous sentence. (1.8)
13–14. B, D, E Key information: *The abolitionist movement...objected to slavery on moral grounds...The American antislavery movement was at the height of its activity during the 1800s, when abolitionists developed the Underground Railroad...; ...a loosely organized system whereby runaway slaves were passed from safe house to safe house as they fled northwards to free states or Canada...hiding places where the slaves were fed and cared for...; The "agents" were the people who planned the escape routes..."conductors" were the fearless men and women who led the slaves toward freedom..."passengers" were the slaves who dared to run away and break for liberty.* Answer (A) is not mentioned; answers (C) and (F) are minor ideas. (1.9)
15. A *Recurrent* means *repeating* in this context. Clues: *...the alternating rise and fall...; ...cycle of the tides*; the prefix *re–* = again. (1.4)
16. D Clues: *The force that generates tides results from the interaction of two forces: the centrifugal force...and the gravitational attraction of the moon acting upon the earth's waters.* (1.1)
17. D Clues: *...the moon's closer distance outranks its much smaller mass, and thus the moon's tide–raising force is more than twice that of the sun.* (1.1)
18. C *Bulges* means *increases* in this context. Clues: *...a maximum accumulation of the waters of the oceans at two opposite positions on the earth's surface.* The increase in water level in two opposite positions on the earth results in high tides in those places. (1.4)
19. B You can infer that when it is high tide in some places, it is low tide in other places. Clues: *...a maximum accumulation of the waters of the oceans at two opposite positions on the earth's surface. At the same time, compensating amounts of water are drawn from all points 90 degrees away....* (1.5)
20. A Clues: *A spring tide occurs...when the moon and earth are lined up with the sun, and thus the moon's pull is reinforced by the sun's pull.* (1.1)
21. C *Counteract* means *oppose* in this context. Clues: *...the gravitational forces of the moon and sun ----- each other; thus, the moon's pull is at minimum strength...*; the prefix *counter–* = against; the prefix *op–* = against. (1.4)
22. A *Spring...tides...have a range of about 20 percent more* is paraphrased in *Spring tides are 20 percent more. Neap tides...have a range of about 20 percent...less, respectively, than the average high tide* is paraphrased in *neap tides 20 percent less, than the average high tide. At any given location* is paraphrased in *in a particular place.* (1.7)
23. C The author's purpose is to give the most extreme example of a tidal range. Clues: *The vertical range of tides...varies according to the size, surface shape, and bottom topography...; Along the narrow channel of the ----- in Nova Scotia, the difference between high and low tides may reach 45 feet under spring tide conditions—the world's widest tidal range.* (1.6)
24. A *Prolonged* means *extended* in this context. Clues: *...periods...*; the prefix *pro–* = forward. (1.4)

25. C The passage does not mention increasing levels of pollution in the oceans as an influence on the vertical range of tides. All the other answers are mentioned: *The vertical range of tides...varies according to the size, surface shape...of the basin in which tidal movement occurs; Several factors affect tidal ranges, including abrupt changes in atmospheric pressure...; They are also influenced by...the growing or shrinking of the world's glaciers.* (1.2)

26. B In the added sentence, *yet another factor* is a transition that adds an example of factors that affect tidal ranges, which the previous two sentences discuss. (1.8)

27–28. C, D, F Key information: *Tides...caused by the gravitational pull of the moon and the sun. The combination of these two variable forces produces the complex recurrent cycle of the tides; The highest and lowest levels of high tide, called spring tide and neap tide, each occur twice in every lunar month...; The vertical range of tides...varies according to the size, surface shape, and bottom topography of the basin... Several factors affect tidal ranges, including abrupt changes in atmospheric pressure... the density and volume of seawater, variations in ocean–current velocities, earthquakes, and the growing or shrinking of the world's glaciers.* Answers (A) and (E) are minor ideas; answer (B) is not mentioned. (1.9)

29. A *Thrust* means *movement* in this context. Clues: *...toward a style...; ...endorsing an American architecture...; ...developed regional styles....* (1.4)

30. D Clues: *Her Lookout Studio...appears to rise straight from the rim of the Grand Canyon...; ...she wanted the building to be a part of its environment...; Like Mary Colter, Frank Lloyd Wright believed that architecture was an extension of the natural environment; Wright's own studio–residence in Wisconsin was completely integrated with the surrounding landscape.* (1.1)

31. C Clues: *Colter created a uniquely Southwestern idiom...; She preferred to use materials indigenous to the region, such as Kaibab limestone and yellow pine.* (1.1)

32. A *She took great stock in materials and setting* is paraphrased in *Colter valued materials and location. Gathering many of her materials on–site* is paraphrased in *many natural materials collected from the building site. Incorporating them in their natural state into her projects* is paraphrased in *she blended into her works many natural materials.* (1.7)

33. C The referent of *them* is something that Mary Colter merged seamlessly. The sentence states that Colter treated building and site as integral halves of a single composition. Logic tells you that *them* refers to *building and site.* (1.3)

34. B Clues: *The ancient Round Tower at Mesa Verde became the direct inspiration for the form and proportions of the Watchtower.* (1.1)

35. B You can infer that the Watchtower's purpose was to help people appreciate the desert scenery. Clues: *Her magnificent Watchtower, overlooking the Grand Canyon in Arizona, was built to suggest an ancient Native American ruin preserved for the delight of the present–day traveler; ...enhancing the view of the surrounding desert and the canyon and river below.* (1.5)

36. B The passage does not state that a direct reference to the region's history characterizes the Prairie style of architecture. All the other answers are given: *Every element of the design corresponded to the surrounding landscape; ...the Prairie style of residential architecture, whose emphasis on horizontal elements...; The eaves of the low–pitched roof extend well beyond the walls, enhancing the structure's horizontality.* (1.2)

37. A *Nestled* means *set comfortably* in this context. Clues: *...integrated with the surrounding landscape; ...in the brow of a hill....* (1.4)

38. D The author's purpose is to show that Wright did not work in just one style. Clues: *...yet it departs from the Prairie philosophy....* (1.6)

39. B The added sentence develops the topic of Taliesin, mentioned in the previous sentence. The added sentence discusses the idea of blurring the distinction between the manmade and the natural, which the rest of the paragraph develops with examples. (1.8)

40–42. C, E, G Mary Colter: *Colter created a uniquely Southwestern idiom incorporating desert landscapes with Native American arts... Colter's integration of history, architecture, and landscape in a unified work of art; She decided to recreate a Native American watchtower... The ancient Round Tower at Mesa Verde became the direct inspiration...; She treated building and site as integral halves of a single composition and merged them seamlessly. Her Lookout Studio...appears to rise straight from the rim of the Grand Canyon....*

A, D Frank Lloyd Wright: *Wright and his followers in Chicago developed the Prairie style of domestic architecture that reflected the natural landscape of the Midwest; ...his favorite commissions were for homes, usually in the country.* Answer (B) is not mentioned; answer (F) is inaccurate for both Mary Colter and Frank Lloyd Wright. (1.10)

LISTENING (p. 488)

1. C The students are mainly discussing the woman's interest in an internship. The woman says: *I'm hoping to do something in the arts, maybe some sort of work experience or internship.* The man says: *What do you have in mind; It sounds like you need to be a theater intern.* (2.1)

2. D The woman says: *It's the whole atmosphere of the-ater that I find exciting.* (2.2)

3. C The woman thinks she is not very skilled at acting. She says: *...I took drama in high school, but I was awful on stage.* (2.3)

4. B The man's purpose is to learn more about the woman's interests in theater, specifically whether directing or lighting interests her. (2.3)

5. A, D The man suggests that the woman talk to her adviser: *Better go see your adviser about this.* He also suggests that she write to the theater: *...what I did—how I got started was, ...just sent formal letters of introduction; It's worth a try, isn't it?* (2.4)
6. B The student wants to discuss an idea for a paper. The student says: *...just an idea I have. I've been thinking—um, I was reading about what's been going on with those houses on Fox Point; ...I was sort of thinking I could write a paper on it.* (2.3)
7. A The man is mainly interested in some houses that are sliding. The man says: *...I was reading about what's been going on with those houses on Fox Point; ...I was sort of thinking I could write a paper on it.* (2.1)
8. B The student thinks the local slide may have a similar cause to that of the Leaning Tower of Pisa, which was caused by settlement. The student says: *I thought maybe...the slide on Fox Point was a case of subsidence...when the earth sinks 'cause there's a weakening of support. I was thinking this might be an example of settlement.* (2.3)
9. B The professor says: *Mudslides are most common on intermediate slopes—27 to 45 degrees....* (2.2)
10. C, D You can predict that the man will include in his research a study of the area's geology: *One suggestion I have is to take a look at the county's Web site. There's a page on the geology of the region.* You can also predict that he will include a search for other mudslides in the area: *This area has a history of slides. There was one on Johnson Island about ten, twelve years ago.* (2.4)
11. B, C The class discusses the organs of a flower: *...its four organs are arranged in four whorls...; ...let's quickly go over the four parts of the flower.* The class also discusses the composite family of flowers: *The large composite family, for example...; ...in the composite family, there are about 19,000 different species worldwide.* (2.1)
12. B The student says: *The petals, the colorful part of the flower. It's the petals that make the flower attractive to insects and birds....* (2.2)
13. D The professor's purpose is to imply that the student will see examples of this type of flower in the lab, and that seeing the flowers will help clarify the point. (2.3)
14. B The professor says: *The large composite family...have flower heads that form a central disk; The flower head—the center part of the plant—actually consists of many tiny, tightly packed complete flowers that stand upright on a flat disk; The petals—what look like petals—are actually larger flowers called rays that extend from the rim of the disk.* (2.2)
15. ✓ True: Incomplete flowers do not have all four basic flower organs: *...incomplete flowers—those lacking one or more of the four floral parts.*
    ✓ Not true: The sunflower has one large symmetrical flower on its stalk: *...a single sunflower is really hundreds of flowers put together.*
    ✓ Not true: All varieties of the English daisy are white with a yellow center: *The English daisy comes in lots of colors—rose, lavender, pink, and white.*
    ✓ True: The arrangement of flowers on the stalk can help identify the plant's family: *One important element in plant classification is the arrangement of flowers on their stalks.* (2.4)
16. B The professor says: *The word "daisy" means "day's eye" and comes from an older Anglo–Saxon word. The English daisy folds up its rays at night and unfolds them again at dawn—the "eye of the day" or "day's eye."* (2.2)
17. C The main idea is that sports contain many elements of hunting. Key phrases: *...the ancient pattern of killing prey is kept alive...; Think of how many Olympic sports there are that involve aiming, throwing, and running—which are all hunting skills; In some sports, there's still a strong symbolic element of the kill.* (2.1)
18. D The professor's purpose is to encourage the student to elaborate, to give a more detailed answer. (2.3)
19. A The professor says: *The ancient Romans brought the hunt to the people by confining it to an arena—the Coliseum. The Coliseum made the hunting field smaller, and this sort of intensified the activity for the entertainment of the spectators.* (2.2)
20. D The professor says: *Take track and field sports. These don't involve animals, but they did originate in hunting; Think of how many Olympic sports there are that involve aiming, throwing, and running—which are all hunting skills.* (2.2)
21. A, D Fencing and boxing contain a symbolic element of the kill. The professor says: *In some sports, there's still a strong symbolic element of the kill. Wrestling, boxing, fencing, martial arts—all these are examples of ritualized fighting.* (2.2)
22. B The professor says: *Because sports contain such a powerful negative element, most have an ideal of acceptable behavior—something we call "sportsmanship."* The professor implies that the concept of sportsmanship makes sports less negative. (2.4)
23. C The speaker mainly discusses how epidemiologists gather data. Key phrases: *We use statistical analyses, field investigations, and a range of laboratory techniques; We gather data in a variety of ways. One way is through what we call descriptive epidemiology...; A second approach is observational epidemiology...; A third approach is experimental epidemiology....* (2.1)
24. A, C Epidemiologists study what causes outbreaks of a disease: *We try to determine the cause and distribution of a disease.* They also study how diseases spread through populations: *We also look at how quickly the disease spreads—and by what method....* (2.2)

25–26. ✓ Descriptive: Statistics are used to describe the trend of a disease over time: *...descriptive epidemiology, or looking at the trends of diseases over time...: Statistics are important in descriptive epidemiology....*

✓ Experimental: Researchers intervene to test a hypothesis about cause and effect: *...experimental epidemiology, sometimes called an intervention study. Experimental research is the best way to establish cause–and–effect relationships...; ...a way to test a hypothesis about cause and effect.*

✓ Observational: Researchers examine the eating habits of sick and well people: *...observational epidemiology, where we observe what people do. We take a group of people who have a disease and a group of people who don't have a disease. We look at their patterns of eating....*

✓ Experimental: A treatment group is compared with a non–treatment group: *...experimental studies...we study treatment and non–treatment groups and then compare the outcomes.* (2.5)

27. A The speaker says: *We take a group of people who have a disease and a group of people who don't have a disease; We also take a group of people who've been exposed to something...and a group of people who haven't, and then observe them over time to see whether they develop a disease or not.* (2.2)

28. A The speaker's purpose is to show how one organization uses various approaches to epidemiology. The speaker says: *From these different approaches—descriptive, observational, and experimental—we can judge whether a particular factor causes or prevents the disease that we're looking at.* (2.3)

29. D The professor says: *A child's first experience with playing an instrument should be by ear, without the distraction of printed music.* (2.2)

30. B The professor's purpose is to introduce the main point he wants to make about when and how children should learn to read music. (2.3)

31. B, C The professor says children should learn to read musical notation when a group of children play music together: *A good time to teach notation is when a group of children play together. The printed score is a way to help them sort of keep track of who plays what and when.* Also, they should learn how to read when the music is too complex to learn by ear: *Another good time is when the child wants to play music that's so complex it would be difficult to learn by ear.* (2.2)

32. A The professor says: *The teacher should play the score for the child the first time through, and demonstrate how the notes on the page are transformed into music.* (2.2)

33. B–C–A The professor says: *(1) Playing by ear is the natural beginning for children; (2) ...a natural first step toward reading music is playing by chord symbols; (3) After children can play by ear, and then by chord symbols, the next step is to read standard music notation.* (2.6)

34. A The professor says: *The three methods of playing music...are all valuable in their own way. Some children will always prefer...; Others will like...: And still others will find their musical home....* The professor implies that each method of playing music is appropriate for some students. (2.4)

SPEAKING (p. 494)

1. Answers will vary.
2. Answers will vary.
3. Key points:
   - The man says he is going to miss the first day of biology class, although attendance is mandatory on the first day.
   - The woman's opinion about the attendance policy is that it is fair and justified.
   - One reason she gives is that the instructor has the right to set the attendance policy.
   - Another reason is that the instructor has to be there every day, and so should the students.
   - Another reason is that participating in class is an important part of learning.
   - Another reason is that students need to go to class because they can't always understand everything on their own.
4. Key points:
   - The ethical problem in the study of fast–food workers was that the researcher had to lie about her background to get the job in the fast–food restaurant.
   - Also, the researcher was using other people without their knowledge or permission to advance her own career by writing a book about the experience.
   - To solve the problem, the researcher told her co–workers that she was writing a book about them. This was acceptable because she was able to get their approval to tell their stories.
5. Key points:
   - The man's problem is that his parents want him to do an internship at a bank, but he would rather work as an intern on a population study.
   - The woman suggests that he do the internship on the population study because it will help him know if he wants a career in pure research.
   - The woman suggests that he tell his father why he wants to work on the population study and explain what a great opportunity it is.
6. Key points:
   - Direct competition is when a bird actively excludes others from getting resources. Examples of direct competition are stealing food, establishing territories, and fighting.
   - Indirect competition is when birds simply use up a resource so that other birds cannot use that resource. An example is a flock of geese eating all the food in an area.
   - Competition and population size are related because when a population increases, the likelihood of competition also increases. Competition may limit the population size because there are not enough resources for more birds.

WRITING (p. 499)

Key points:

- The Robbers Cave Experiment points to the more troubling aspects of peer groups; this casts doubt on the point in the reading that peers play an important positive role in children's socialization.
- The first stage of the experiment discouraged competition, yet the groups began to show signs of feeling competitive; this contradicts the point in the reading that peer groups build friendship, tolerance, and cooperation.
- The second stage of the experiment encouraged competition in a series of contests, resulting in insults and negative attitudes between the groups; this casts doubt on the point in the reading that competitive strategies are healthy and necessary in a competitive society.
- The third stage of the experiment involved a cooperative task, which greatly reduced prejudice in just a few days; this casts doubt on the point in the reading that peers can tease and tolerate each other without the intervention of adults.
- The experiment shows that, in peer groups, competition comes more naturally than cooperation; this contradicts the point in the reading that peer groups promote both cooperation and the learning of competitive strategies.

TEST 3

READING (p. 503)

1. B Clues: *Cold storage, or refrigeration...in order to delay the growth of microorganisms—bacteria, molds, and yeast—that cause food to spoil.* (1.1)
2. A *Perishable* means *capable of spoiling* in this context. Clues: *...delay the growth of microorganisms...that cause food to spoil; ...lengthen its storage time.* (1.4)
3. B You can infer that cold storage was dependent on a source of ice or snow. Clues: *Before artificial refrigeration was invented, people stored perishable food with ice or snow to lengthen its storage time; ...keeping it in an ice–filled pit...; ...ice was transported from mountains, or harvested from local lakes or rivers....* (1.5)
4. A Artificial refrigeration does not involve the pumping of water vapor through a pipe; rather, a refrigerant is pumped through a pipe. All the other answers are given: *The refrigerators of today rely on the same basic principle of cooling caused by the rapid evaporation and expansion of gases; A refrigerator uses the evaporation of a volatile liquid...; The heat is moved from the inside of the container to the outside.* (1.2)
5. D *As the liquid turns to vapor* is paraphrased in *During evaporation. It loses heat and gets colder* is paraphrased in *the liquid becomes colder. The molecules of vapor use energy to leave the liquid* is paraphrased in *the vapor molecules use energy.* (1.7)
6. C Clues: *In 1842, physician John Gorrie used Evans's design to create an air–cooling apparatus to treat yellow–fever patients in a Florida hospital.* (1.1)
7. C The referent of *it* is something that became very cold as the ether evaporated. The sentence states that printer James Harrison cleaned his type with ether. Logic tells you that *it* refers to *type.* (1.3)
8. D The author's purpose is to show how refrigeration changed a whole industry. Clues: *In solving Busch's spoilage and storage problems, refrigeration also revolutionized an entire industry.* (1.6)
9. A *Constrained* means *restricted* in this context. Clues: *...stored their beer in caves, and production was ----- by the amount of available cave space.* (1.4)
10. B Clues: *...the newly invented refrigerated railcar, which was insulated with ice bunkers in each end.* (1.1)
11. B *Toxic* means *poisonous* in this context. Clues: *...ammonia, methyl chloride, and sulfur dioxide...; After those gases accidentally killed several people....* (1.4)
12. C The added sentence discusses the work of Gorrie, whom the previous sentence introduces. Answer (D) is incorrect because adding the sentence there would interrupt the logical link between *in 1851* and *In the same year* in consecutive sentences. (1.8)

13–14. B, C, E Key information: *Before artificial refrigeration was invented, people stored perishable food with ice or snow to lengthen its storage time; A refrigerator uses the evaporation of a volatile liquid, or refrigerant, to absorb heat. ...the refrigerant is compressed, pumped through a pipe, and allowed to vaporize; In 1842...an air–cooling apparatus to treat yellow–fever patients... ...vapor–compression refrigeration to the brewing and meatpacking industries.* Answers (A), (D), and (F) are minor ideas. (1.9)

15. B Clues: *Canadian English became a separate variety of North American English...when thousands of Loyalists...fled north to Canada. Many Loyalists settled in southern Ontario in the 1780s....* (1.1)

16. A *Norms* means *patterns* in this context. Clues: *...their speech became the basis...; ...a definition based on the ----- of urban middle–class speech.* (1.4)

17. C *A great deal in common with* means *many similarities to* in this context. Clues: *...the ways in which it resembles....* (1.4)

18. B Clues: *Modern Canadian English is usually defined by the ways in which it resembles and differs from American or British English; ...many Americans identify a Canadian accent as British; ...many British people identify a Canadian accent as American....* (1.1)

19. B The referent of *the two varieties* is two things that have many similarities. The previous sentence discusses Canadian and American English. Logic tells you that *the two varieties* refers to *Canadian English and American English.* (1.3)

20. D *Spot* means *find* in this context. Clues: *...instantly recognizable...; ...one Canadian in a crowded room will easily ----- the other Canadian among the North Americans.* (1.4)

21. C *Canadian pronunciation reflects the experience of a people struggling* is paraphrased in *this effort is shown in their pronunciation. Struggling for national identity against two strong influences* is paraphrased in *have tried to distinguish themselves as a nation.* (1.7)

22. A *Kerosene* did not originate in a North American Indian language. All the other answers did originate in Indian languages: *Several words are borrowed from North American Indian languages, for example, "kayak,"... "parka,"...; The name of the country itself has an Indian origin; the Iroquois word "kanata" originally meant "village."* (1.2)

23. D You can infer that much of the vocabulary for ice hockey originated in Canada. Clues: *...many words and phrases originating in Canada itself...; A number of terms for ice hockey...have become part of World Standard English.* (1.5)

24. A Clues: *Some features of Canadian English...are often deliberately identified with Canadian speakers...; Among the original Canadian idioms, perhaps the most famous is the almost universal use of "eh?"....* (1.1)

25. D *Homogeneity* means *sameness* in this context. Clues: *While there is a greater degree of ----- in Canadian English...several dialect areas do exist across Canada. Linguists have identified distinct dialects....* (1.4)

26. C In the added sentence, *Thus* is a transition that shows result by linking *"out" is pronounced like "oat"* in the previous sentence with *"out" rhymes with "boat"* in the added sentence. (1.8)

27–28. A, D, E Key information: *Canadian English has a great deal in common with the English spoken in the United States... About 75 percent of Canadians use the British "zed"... ...75 percent of Canadians use the American pronunciation of...; The differences are mainly in pronunciation... Canadian pronunciation reflects the experience of a people struggling for national identity...; An important characteristic of the vocabulary of Canadian English is the use of many words and phrases originating in Canada itself....* Answers (B), (C), and (F) are minor ideas. (1.9)

29. A *Branch out* means *separate* in this context. Clues: *...in different directions...; ...separate societies....* (1.4)

30. A *They* in the highlighted sentence refers to *physical anthropologists*, the subject of the previous sentence. *They ask questions* is paraphrased in *Physical anthropologists investigate. The events that led a tree–dwelling population of animals to evolve into two–legged beings with the power to learn—a power that we call intelligence* is paraphrased in *how intelligent human beings evolved from creatures that lived in trees.* (1.7)

31. D *Speculate* means *think* in this context. Clues: *...investigate...; ...study...; ...find out...*; the stem *–spec–* = see, observe. (1.4)

32. C The author's purpose is to give examples of fieldwork done by physical anthropologists. Clues: *...excavating at Olduvai Gorge in Tanzania...; ...discovered stone tool and hominid evidence...; ...discovered yet other types of hominid skulls in Kenya....* (1.6)

33. D Clues: *Like physical anthropologists, cultural anthropologists study clues about human life in the distant past....* (1.1)

34. B Clues: *Anthropologists doing fieldwork often produce an ethnography, a written description of the daily activities of men, women, and children....* (1.1)

35. B *Sift through* means *sort* in this context. Clues: *...try to discover cross–cultural patterns....* (1.4)

36. B The referent of *They* is someone or something that uses findings to argue for or against particular hypotheses. The subject of the previous sentence is *ethnologists*. Logic tells you that *They* refers to *ethnologists.* (1.3)

37. D The passage does not state that Margaret Mead wrote about economic systems of pioneer women. All the other answers are given: *Mead published ten major works...studies of...the cultural and biological bases of gender, the nature of cultural change...and race relations.* (1.2)

38. A You can infer that Margaret Mead's work made an impact on the field of anthropology. Clues: *A cultural anthropologist who achieved worldwide fame was Margaret Mead; ...published ten major works...; ...subjects of major intellectual consequence...; ...new technologies for research...; new ways that anthropology could serve society.* (1.5)

39. A The added sentence introduces and defines the field of anthropology, which the rest of the paragraph develops with facts and examples. (1.8)

40–42. C, D, G Physical anthropology: *...study the connections between humans and other primates that are still living. ...clues to the relationship of humans to various primates; Physical anthropologists study the fossils and organic remains of once–living primates. ...hominid evidence... ...hominid skulls...; Physical anthropology focuses on human evolution... ...detectives whose mission is to solve the mystery of how humans came to be human.*

A, E Cultural anthropology: *Cultural anthropology focuses on culture... ...cultural anthropologists also look at the similarities and differences among human communities today; Some cultural anthropologists work in the field, living and working among people in societies that differ from their own. ...often produce an ethnography, a written description....* Answers (B) and (F) are inaccurate for both physical anthropology and cultural anthropology. (1.10)

LISTENING (p. 516)

1. A, C The speakers discuss their summer plans. The professor asks: *So are you ready for summer?* The student then describes his plans for the summer program at Silverwood. The student asks: *What will you be doing this summer?* The professor then discusses her teaching. The speakers also discuss their musical interests. The student says: *I'll be studying oboe with him, and also orchestra...and I'm hoping to do the French horn, too, and maybe take up the krummhorn....* The professor says: *I'll be teaching Theory I and II, and coaching voice; I play piano and sing.* (2.1)
2. A The professor means that he is one of the best teachers available. *Couldn't ask for a better teacher* means that there is no better teacher to ask for. (2.4)
3. B The professor's purpose is to comment on the man's summer workload. A *full plate* is a busy schedule with a lot of activities. (2.3)
4. C The professor says: *Yes, I am—a jazz quintet. We do mostly standards. I play piano and sing. For me, that's fun and relaxation time.* (2.2)
5. D The professor says: *I heard you got the scholarship for the summer program at Silverwood.* The student says: *...I'm sure your recommendation helped me a lot; And thanks again for the recommendation.* You can infer that the professor recommended the student for a scholarship. (2.4)
6. B The professor mainly discusses the development of film style. Key phrases: *...film was developing its own style...; ...the editing technique of cutting; ...stylistic camera work and editing...; ...elements of film "grammar" and the art of the story film.* (2.1)
7. C, D Camera framing contributes to the style of a film: *...style is the texture of a film's images and sounds; ...the filmmaker's systematic use of the techniques of the medium—for example... camera framing....* Film cutting also contributes to style: *A few filmmakers of the silent era were already developing film style, most notably in the editing technique of cutting.* (2.2)
8. C The professor says: *...film was something new...it was an art form that owed its birth to the technology of the moving picture camera. The critics preferred to see stylistic camera work and editing—the techniques that set film apart from theater.* (2.2)
9. A The professor's purpose is to give an example of an early advancement in film style. The professor says: *Another film technique—called cross–cutting—made it possible to tell two stories at the same time. Cross–cutting—it's also called parallel action—it involves showing segments from two different sequences, moving back and forth from one to the other so the two stories appear to be taking place at the same time.* (2.3)
10. D The professor means that D.W. Griffith improved film techniques, making film a literary art. Griffith redefined the innovations of other filmmakers. His films were recognized as a unique narrative form because he improved the "grammar" and storytelling of film. (2.4)
11. C The professor says: *...closer views of people's faces or gestures. These closely framed shots are known as close–ups. The close–up conveys a character's emotions through subtle changes in the eyes, mouth, and brow.* You can infer that the close–up camera shot would best show that a character is frightened. (2.4)
12. B The professor mainly discusses a decline in pollinator populations. Key phrases: *...pollinator scarcity; ...the worst pollinator crisis in history; ...a steep decline in North American populations of honeybees.* (2.1)
13. A, D Parasites have affected pollinator populations: *An outbreak of parasitic mites has caused a steep decline in North American populations of honeybees.* Farm chemicals have also affected pollinator populations: *In California, farm chemicals are killing around ten percent of all the honeybee colonies.* (2.2)
14. A The professor's purpose is to show the effect of agriculture on pollinators. Large–scale agriculture has reduced the areas of nectar–producing plants that pollinators depend on. (2.3)
15. B The professor says: *Unfortunately, the herbicides used on the milkweed in the Great Plains are taking a toll on monarchs, and fewer of them are reaching their winter grounds in Mexico.* You can infer that the population of monarch butterflies has been reduced because of herbicides. (2.4)

16–17. ✓ Long–nosed bat: It feeds on the nectar of cactus flowers: *...the long–nosed bat. These amazing animals feed on cactus flowers.*
✓ Honeybee: It pollinates four out of five food crops in North America: *...honeybees are the dominant pollinator because they play a role in pollinating four out of five food crops in North America.*
✓ Monarch butterfly: It returns to the same site every year: *The monarch is the only butterfly that returns to a specific site year after year.*
✓ Long–nosed bat: It has been mistaken for a similar animal: *But the long–nosed bat is having a tough time, too. Some desert ranchers mistake them for vampire bats....* (2.5)

18. B, C The speaker discusses a change in the design of human settlements: *As human settlements evolved from simple groups of huts to larger villages, and then to towns and cities, their basic pattern changed.* He also discusses the significance of trees in urban spaces: *The rest is covered by trees and grass—foresters call it the "urban forest"...; The extent of this forest is sort of amazing—two–thirds of our urban space.* (2.1)

19. A The speaker says: *The early rural villages grew naturally—sort of organically...; ...buildings were clustered near water sources...; Our city planners and architects have converted the organic pattern of the village into a geometrically perfect grid.* (2.2)

20. D The speaker says: *...foresters call it the "urban forest"—meaning all the trees in city parks, the trees planted along streets and highways, and the trees in people's yards.* (2.2)

21. A The speaker's purpose is to give an example of an urban park project. The speaker says: *...one of North America's first public parks—that was sort of created as a unified project—was Central Park in New York City.* (2.3)

22. D The speaker says: *...an oasis in the middle of steel and stone. Central Park has been called "the city's lung" because of its purifying effect on the air, not to mention its effect on the human psyche.* The speaker implies that New York's Central Park contributes to the quality of life in the city. (2.4)

23. B The speaker's opinion is that the city is a symbol of human achievement. The speaker says: *...the city is our most spectacular creation...; ...the finest evidence of our civilization is the city. The city is a symbol of experimentation and creation....* (2.3)

24. C The purpose of the discussion is to review the different types of computer storage. Key phrases: *...can we go over memory again; ...memory can be either of two things...; ...two kinds of memory. I need to be able to explain them. Now, what's the difference between RAM and ROM?* (2.3)

25. B The tutor says: *ROM—read–only memory—stores the information your computer needs to perform basic functions and run programs that are built into your computer....* (2.2)

26. C The tutor's purpose is to explain the difference between memory and disk storage because the student doesn't understand the difference between them. The tutor says: *That's a really good question. I'll answer it with an analogy. Imagine you're at the library, doing research....* (2.3)

27. A The tutor says: *Now, which part of your computer's memory is sort of like the library table; That's right. RAM.* (2.2)

28. ✓ Yes: The files are returned to disk storage: *When you finish your work session on the computer, all the files are returned to disk storage.*
✓ Yes: The computer loads the files into RAM: *...when I ask for another file, the computer gets it from the disk...and loads it into RAM.*
✓ No: The librarian lays folders on a table: Not part of a computer work session.
✓ No: The computer is stored in a briefcase: Not part of a computer work session. (2.6)

29. D The main idea is that photography changed the nature of war reporting. Key phrases: *...a series of photographs that ushered in a new era in the visual documentation of war; ...the first time most people had ever seen the carnage of the war; ...the battlefield was no longer comfortably distant—the camera was bringing it closer...; ...photography made a huge impact, and media coverage of war—and public opinion about war—would never be the same again.* (2.1)

30. A The professor means that more Americans died on that day than on any other day in American history. Several thousand men died or were wounded in one day, and there has never been another day like that. (2.4)

31. C The professor says: *...Mathew Brady, a leading portrait photographer of the time. Brady owned studios in New York and in Washington....* (2.2)

32. D The professor's purpose is to emphasize the power of photography in making people aware of the effects of the war. (2.3)

33. A, C One limitation of photography was that the slow exposure time did not allow action shots: *...the exposure time of the camera was slow...; ...it was not possible for photographers to take action pictures.* Another limitation was that newspapers were not able to reproduce photographs: *...newspapers couldn't yet reproduce photographs.* (2.2)

34. B The professor says: *Mathew Brady's work was the first instance of the comprehensive photo–documentation of a war—the Civil War—which as a result became the first media war; ...media coverage of war—and public opinion about war—would never be the same again.* The professor implies that Mathew Brady's work had a lasting effect on photography and journalism. (2.4)

SPEAKING (p. 522)

1. Answers will vary.
2. Answers will vary.
3. Key points:
   - A new policy requires that students who take a lecture course in social science also take a discussion section for that course.
   - The man's opinion about the required discussion section is favorable.
   - One reason he gives is that three hours of lecture time is not long enough for the professor to cover all the material they need to know for the examination.
   - Another reason is that the discussion section will give students a chance to talk to the teacher and other students and thus to learn more.
   - Another reason is that it is easy to get a high grade in the discussion section.
4. Key points:
   - The rabbit's large ears are part of a homeostatic system by which the rabbit can maintain a constant internal body temperature.
   - The rabbit regulates the amount of blood flowing through the blood vessels of its ears to adjust heat loss to the surroundings.
   - When the rabbit's body temperature increases, the rabbit's brain turns on the body's cooling system. The blood vessels in the ears expand and fill with warm blood; heat escapes from the ears, causing the body temperature to drop.
   - When the rabbit's body temperature decreases, the brain turns on the body's warming system. Blood vessels in the ears constrict and send blood away from the skin, which reduces heat loss from the ears.
5. Key points:
   - The woman's problem is that she needs an official copy of her transcript right away, but she cannot get one because there is an unpaid charge on her student account that was mistakenly charged to her instead of her roommate.
   - The man suggests that she pay the charge to clear her account, and then have her roommate pay her back.
   - The man suggests that she send her roommate in to pay the charge.
   - The man suggests that she talk to the dean's secretary about releasing the transcript.
6. Key points:
   - The communication between babies and mothers is musical because there is a shared sense of timing.
   - A baby will often lead the earliest "conversations" with his mother, just as one musician will lead another in a performance.
   - A baby's sounds connect two people in an exchange of sounds. A baby can make sounds with a musical inflection when "talking" with his mother.
   - Babies and mothers create a special musical language called baby talk.
   - Babies learn to make a large vocabulary of meaningful sounds; different meanings are expressed by changes in intonation, rhythm, and timing—all characteristics of music.

WRITING (p. 527)

1. Key points:
   - Chess players have the ability to plan ahead and predict moves; this illustrates the point in the reading that visual–spatial intelligence involves the ability to create mental imagery and to transform that imagery.
   - Blindfolded chess players must remember the positions of the chess pieces because they cannot see the board; this illustrates the point in the reading that visual–spatial intelligence involves having a visual memory.
   - The chess player's memory stores patterns, plans, ideas, and strategies rather than a rote list of moves; this illustrates the point in the reading that visual–spatial intelligence involves a memory that is abstract rather than pictorial—a kind of geometrical memory.
   - Chess masters have the ability to reconstruct a chessboard they have seen for just a few seconds; this illustrates the point in the reading that people with visual–spatial intelligence can draw whatever object they see, usually after seeing the object for only a short time.

TEST 4

READING (p. 531)

1. C *Precocity* means *advanced skill* in this context. Clues: *...abilities...; ...talent...; ...exceptional skill...; ...gifted....* (1.4)
2. A *A musically gifted child has an inborn talent* is paraphrased in *Children may be born with superior musical ability. The extent to which the talent is expressed publicly* is paraphrased in *how this ability is developed. Will depend upon the environment in which the child lives* is paraphrased in *their environment will determine.* (1.7)
3. B Clues: *Pitch—or melody—is more central in certain cultures...; Rhythm ...is emphasized in sub–Saharan Africa....* (1.1)
4. A *Predisposed* means *inclined* in this context. Clues: *All children have some aptitude for making music; Infants are especially ----- to acquire these core aspects of music...*; the prefix *pre–* = before; the stem *–pos–* = put. (1.4)
5. C Clues: *Individual differences begin to emerge in young children as they learn to sing. Some children can match large segments of a song by the age of two or three. Many others can only approximate pitch at this age....* (1.1)
6. A Clues: *The appearance of superior musical ability in some children provides evidence that musical talent may be a separate and unique form of intelligence; In many of these cases, the child is average in every other way but displays an exceptional ability in music.* (1.1)
7. B The author's purpose is to give an example of a well–known musical prodigy. Clues: *Every generation in music history has had its famous prodigies...; In the eighteenth century, Wolfgang Amadeus Mozart began composing and performing at the age of six.* (1.6)
8. D Clues: *...modulation—transitions from one key to another....* (1.1)
9. C Appreciation for a wide variety of musical styles is not given as an example of exceptional musical talent. All the other answers are given: *...a remarkable "ear" or extraordinary memory for music...; By the age of eleven, he had composed three symphonies and 30 other major works; ...able to play "Happy Birthday" in the style of various composers....* (1.2)
10. B *Haven* means *safe place* in this context. Clues: *...the child may cling to music because it represents a ----- in a world that is largely confusing and frightening.* (1.4)
11. D You can infer that exceptional musical ability is the result of natural talent and a supportive environment. Clues: *...exceptional skill as a result of a well–designed instructional regime...; ...the good fortune to be born into a musical family in a household filled with music; A musically gifted child has an inborn talent; however, the extent to which the talent is expressed publicly will depend upon the environment in which the child lives.* (1.5)
12. B In the added sentence, *They* refers to *normal children*, the subject of the previous sentence. The added sentence develops the idea that children *can produce individual sounds and sound patterns*, mentioned in the previous sentence. The added sentence introduces *patterns and tones sung by other people*, which the next sentence develops with *their mother's songs.* (1.8)

13–14. B, C, F Key information: *Musically gifted children master at an early age the principal elements of music...All children have some aptitude for making music... The early appearance of superior musical ability in some children...; ...a natural understanding of musical structure. ...prodigies—individuals with exceptional musical powers... ...began composing and performing at the age of six; ...musical talent is part of an otherwise disabling condition such as autism... Unusual musical ability is a regular characteristic of certain anomalies such as autism.* Answers (A) and (D) are minor ideas; answer (E) is not mentioned. (1.9)

15. D Clues: *...psychological reasons: modesty, taboo, magical influence, or the desire to please.* (1.1)
16. B Clues: *And like our hunting–gathering ancestors, most men still carry things on their person....* (1.1)
17. C The referent of *these two functions* is two uses for the garments that we wear today. The paragraph discusses using clothing to maintain warmth and to carry objects. Logic tells you that *these two functions* refers to *maintaining warmth and carrying objects.* (1.3)
18. A *We might say that clothing has to do with covering the body* is paraphrased in *Clothing serves a physical purpose. Costume concerns the choice of a particular form of garment for a particular purpose* is paraphrased in *costume has a personal, social, or psychological function.* (1.7)
19. D *Ornaments* means *decorations* in this context. Clues: *...a function beyond that of simple utility; ...the addition of....* (1.4)
20. A You can infer that the author believes we can learn about a society's social structure by studying costume. Clues: *...costume fulfilled a function beyond that of simple utility; Costume communicates the status of the wearer...; Costume denotes power...; ...costume has come to be an expression of social class and material prosperity.* (1.5)
21. A *Beacons* means *signals* in this context. Clues: *...uniform says, "I am part of a powerful machine..."; Uniforms are immediate ----- of power and authority. If a person needs to display power....* (1.4)
22. D The author's purpose is to show how costume conveys authority. Clues: *Uniforms are immediate beacons of power and authority. If a person needs to display power—a police officer, for example...; Height can be exaggerated...thick clothing can make the body look broader and stronger, and boots can enhance the power of the legs.* (1.6)

23. C The passage does not state that having a heart condition is likely to be indicated by a person's costume. All the other answers are given: *A uniform is a type of costume that serves the important function of displaying membership in a group... sports team...; ...the uniform of the prisoner...; Religious costume signifies spiritual or superhuman authority....* (1.2)

24. C The added sentence gives examples of *professional or administrative costume*, mentioned in the previous sentence; *the judge's robes and the police officer's uniform* are examples that express authority and power. (1.8)

25–28. C, E, G Clothing: *Another function of early clothing—providing comfort and protection... ...covered their bodies more and more to maintain body warmth; ...we first clothed our bodies for some physical reason, such as protecting ourselves from the elements; ...the function of the earliest clothing was to carry objects. ...carrying was much easier if they were wearing simple belts or animal skins from which they could hang weapons and tools. ...transport collected food back to the settlement....*

A, D, F, I Costume: *...costume reflects social factors such as personal status, religious beliefs...; A uniform is a type of costume that serves the important function of displaying membership in a group...; Costume helped to impose authority... ...enhanced his physical superiority and suggested he was superhuman. ...professional or administrative costume is designed to distinguish the wearer and to express personal or delegated authority; Religious costume signifies spiritual or superhuman authority....* Answers (B) and (H) are not mentioned. (1.10)

29. A Clues: *Carbon dioxide and other naturally occurring gases in the earth's atmosphere create a natural greenhouse effect by trapping and absorbing solar radiation. These gases act as a blanket and keep the planet warm....* (1.1)

30. D *The man–made greenhouse effect* is paraphrased in *emissions that cause the greenhouse effect. The exhalation of industrial civilization* is paraphrased in *Industrial activities result in emissions.* (1.7)

31. C The passage does not give the conversion of carbon dioxide to oxygen as a contributing factor to global warming. All the other answers are given: *A major contributing factor is the burning of large amounts of fossil fuels—coal, petroleum...; Another is the destruction of the world's forests...; The main greenhouse gas, water vapor, will increase in response to global warming and further enhance it.* (1.2)

32. A *Enhance* means *strengthen* in this context. Clues: *...causing the earth's surface to become warmer; ...will increase in response to...; ...further....* (1.4)

33. D You can infer that climate change is likely to continue as long as heat–trapping gases accumulate. Clues: *This is changing global climate at an unusually fast rate; ...global temperatures could rise as much as 10.5 degrees F during the next century as heat–trapping gases from human industry accumulate in the atmosphere.* (1.5)

34. C Clues: *...higher temperatures and more frequent drought during the growing season might require farmers to switch from corn to wheat....* (1.1)

35. A *Inundate* means *cover* in this context. Clues: *A rise in sea level...; ...islands and low–lying coastal plains...; Millions of acres of coastal farmlands would be covered by water.* (1.4)

36. B The author's purpose is to introduce conclusive evidence of global warming. Clues: *Global warming has already...; ...ample evidence...; Both teams concluded...; These studies are hard evidence....* (1.6)

37. A The referent of *they* is something or someone that found ample evidence of plants blooming and birds nesting earlier in the spring. The subject of the sentence is *research teams*. Logic tells you that *they* refers to *teams*. (1.3)

38. B *Hard* means *real* in this context. Clues: *...hundreds of published papers...; ample evidence...; These studies are ----- evidence that the natural world is already responding dramatically to climate change....* (1.4)

39. C Clues: *...ample evidence of plants blooming and birds nesting earlier in the spring. Both teams concluded that rising global temperatures are shifting the ranges of hundreds of species—thus climatic zones—northward.* (1.1)

40. D The added sentence summarizes the two ideas discussed in the paragraph, melting ice caps and the expansion of water. The first three sentences discuss the effect of melting polar ice caps. The fourth sentence mentions the expansion of water in the clause *the warming of seawater will cause the water to expand*, which the added sentence logically follows. (1.8)

41–42. A, D, F Key information: *...a rise in atmospheric levels of carbon dioxide and other heat–trapping greenhouse gases. ...buildup of greenhouse gases is already causing the earth's average surface temperature to rise; Global warming may also cause a rise in sea level... ...rising global temperatures are shifting the ranges of hundreds of species—thus climatic zones—northward; ...changes in the range and behavior of plant and animal species... If global warming trends continue, changes in the environment will have an enormous impact on world biology.* Answer (B) is not mentioned; answers (C) and (E) are minor ideas. (1.9)

LISTENING (p. 544)

1. B The man wants to change his housing situation. He says: *I'd kind of like to live in a smaller building. I'm thinking of moving next semester.* (2.3)
2. A, D A full refrigerator and two to four bedrooms are features of the suites. The woman says: *The suites have two to four bedrooms...and a full refrigerator.* (2.2)
3. D The woman's purpose is to apologize for not answering the man's question. The man asks about the rent more than once before the woman answers him. (2.3)
4. C The man thinks the rent in the villages is higher than he hoped it would be. He says: *Wow. That's more than I expected: ...I was hoping it'd be a lot less.* (2.3)
5. A The man says: *Number twenty–seven...oh...wow.* He is the 27th person on the waiting list. You can infer that he doesn't think he will be able to get a room in the villages. (2.4)
6. A The students mainly discuss characteristics of two design styles, Art Deco and Art Moderne. The man says: *...it seems to me that Art Deco and Art Moderne are the same thing.* The woman says: *...Art Deco came a little before Moderne; Art Deco has more decoration than Art Moderne; Art Moderne is simpler than Deco.* (2.1)
7. D The man says: *There's a lot we have to remember; ...there's Art Nouveau, and Art Deco, and Art Moderne...I have a hard time keeping it all straight.* You can infer that he is concerned about the amount they have to learn. (2.4)
8. C The woman contrasts the details of two design styles. She says: *Art Deco has more decoration than Art Moderne; Art Deco uses a lot of straight lines and slender forms; Art Moderne is simpler than Deco. It has...things like more rounded corners, flat roofs, and...the walls are smooth and don't have any decoration. It's more streamlined than Deco.* (2.1)
9. ✓ Art Deco: This style has straight lines, slender forms, and geometric patterns: *...geometric designs.... Art Deco uses a lot of straight lines and slender forms.*
   ✓ Art Moderne: This style has rounded corners, smooth walls, and little decoration: *Art Moderne is simpler than Deco. It has...things like more rounded corners, ...the walls are smooth and don't have any decoration.*
   ✓ Art Deco: This is the style of a downtown building that the woman likes: *My favorite building is the Maritime Building. It's downtown, right across from my father's office. It's Art Deco....* (2.5)
10. C The man says: *...this is an idea for our project. We could take pictures of the buildings and do a slide show in class; Let's talk to Professor Vargas and see what he thinks.* You can infer that the students are required to do a project for their design class. (2.4)
11. D The main purpose of the lecture is to explain how early people started farming. Key sentences: *What led these people to invent agriculture, a completely different way of life; ...ancient people changed from hunters and gatherers to farmers when they began to domesticate wild plants and animals.* (2.3)
12. A The professor says: *The people brought the squash seeds back to their camp. As they ate the seeds, some seeds fell to the ground all around the camp. Later, some of these seeds germinated and produced new plants. Thus, the hunter–gatherers became farmers sort of by accident.* You can infer that the process of gathering wild food led naturally to farming. (2.4)
13. B–D–C–A The professor says: *(1) The people brought the squash seeds back to their camp; (2) As they ate the seeds, some seeds fell to the ground...; (3) Later, some of these seeds germinated and produced new plants; (4) ...they started to take more of an interest in the plants. They tried to protect the plants in practical ways.* (2.6)
14. B The professor says: *Eventually, the people realized that seeds grew better when they were planted in earth that was turned over. So they began to scratch the earth with a digging stick....* (2.2)
15. C The professor's purpose is to point out that agriculture developed over a very long time. When something doesn't happen overnight, it takes a long time. The professor says: *The process probably took thousands of years.* (2.3)
16. A The professor says: *...it's very likely that the change from a hunting–gathering society to an agricultural society followed a similar pattern in different regions of the world.* (2.2)
17. B The hydrologic cycle is the movement of water through the earth and atmosphere. Key sentences: *Water continuously circulates from the ocean to the atmosphere, to the land, and back to the ocean, providing us with a renewable supply of purified water. This complex cycle—known as the hydrologic cycle—balances the amount of water in the ocean, in the atmosphere, and on the land.* (2.1)
18. A The professor says: *Climatologists study the role of solar energy in the cycle. They're mainly concerned with the atmospheric phase of the cycle—how solar energy drives the cycle through the...processes of evaporation, atmospheric circulation, and precipitation.* (2.2)
19. B The professor says: *The land phase of the cycle is the concern of hydrologists. Hydrologists study the vast quantities of water in the land phase of the cycle, how water moves over and through the land, and how it's stored on or within the earth.* (2.2)
20. A, C Water that falls to the earth as precipitation is stored in lakes or underground: *The water that falls to earth is stored on the surface in lakes, or it penetrates the surface....* The water eventually flows back to the ocean: *Eventually, all of the water falling on land makes its way back to the ocean.* (2.2)
21. A The professor's purpose is to describe the importance of runoff and groundwater. The amount of runoff and groundwater equals the amount of water from the ocean that falls on the land as precipitation. (2.3)
22. C The professor says: *Trees and plants circulate and store water...; ...plants...are also part of the cycle, since water is a large part of the mass of most organisms. Living organisms store and use water....* You can infer that plants perform the function of water storage. (2.4)

23. B The professor mainly gives a history of an art movement. Key phrases: *The Group's origins date back to the 1911 showing...; ...a new direction for Canadian art, a distinctly Canadian style of painting; Their 1920 exhibition was an important moment in Canadian art.* (2.1)
24. A The professor's view is that the Group of Seven created a distinctive Canadian art inspired by Canada itself. The professor says: *...a generation of artists set out to create a school of painting that would record the Canadian scene and reinforce a distinctive Canadian identity; Their 1920 exhibition was an important moment in Canadian art. It proclaimed that Canadian art must be inspired by Canada itself.* (2.3)
25. D The professor's purpose is to show how one artist, Tom Thomson, inspired the Group's direction in seeking a distinctly Canadian art. (2.3)
26. B, D The Group of Seven painted jack pine trees and uninhabited landscapes: *... "The Jack Pine," one of the nation's best-loved pictures; ...a bleak, somber, incredibly beautiful landscape of rock outcroppings, storm-driven lakes, and jack pine trees—a land totally uninhabited by people.* (2.2)
27. C The professor means that much of the Group's work has come to represent Canada. An *icon* is a symbol, a representation of something else. (2.4)
28. A The professor says: *A.Y. Jackson was influential for his...; Arthur Lismer's work has an intensity all its own...; Lawren Harris went further than the rest....* You can conclude that the Group did not share a single style of painting. (2.4)
29. C The professor mainly discusses how leadership and power are related. Key phrases: *...leaders always have some degree of power; Both leadership and power involve the ability to...; Although leadership and power are different things, they're related in important ways.* (2.1)
30. A The professor's purpose is to show that having power doesn't imply leadership. The professor says: *The headwaiter has power to some degree—for example, the power to seat you at the best table by the window—but he doesn't necessarily have the qualities we associate with leadership.* (2.3)
31. B The professor's purpose is to distinguish between leaders and power holders. A military dictator and a robber have power, but they may lack leadership skills. (2.3)
32. D The professor says: *Leadership and power are not the same thing, although they are similar in this one way. Both leadership and power involve the ability to...bring about the results you want....* (2.2)
33. B, C The ability to use physical force is a source of power: *Probably the oldest source of power is the ability to use physical force.... The ability to motivate people is another source of power: ...the ability to motivate—all of these are sources of power.* (2.2)
34. A The professor says: *Remember, both leadership and power involve the ability to accomplish the results you want, and successful managers understand how the two work together to make this happen.* The professor implies that successful managers know how and when to use their power. (2.4)

SPEAKING (p. 550)

1. Answers will vary.
2. Answers will vary.
3. Key points:
   - Because of an increase in the number of swimming classes, the university will reduce the hours that the swimming pool is open for students' personal use.
   - The man does not like the change in swimming pool hours.
   - One reason he gives is that the change will eliminate late afternoon hours, when he likes to swim.
   - Another reason is that swimming classes don't take up the whole pool; he suggests keeping half of the pool open for other people.
   - Another reason is that it is not fair for the university to take away pool time; he suggests extending the morning hours to make up for the loss.
4. Key points:
   - The patient's symptoms included tremors of the head, headaches, stiff neck, sore back, clicking jaw, and inability to open her mouth.
   - Chiropractic treatment was recommended because the symptoms had been present for 20 years and painkilling medication did not help; the patient was very frustrated and willing to try anything.
   - This patient's experience supports the practice of chiropractic because it was successful. Patient success stories help increase the acceptance of chiropractic in the medical establishment.
5. Key points:
   - The woman's problem is that she wants to take statistics, but that course is full, so she may have to take calculus instead.
   - The man suggests that she register for both courses, get on the waiting list for statistics, and if she gets into statistics, then she can drop calculus.
   - The man suggests that she talk to the statistics instructor and try to persuade the instructor to let her in the class.
6. Key points:
   - Fears in young children are normal. Fears help children solve issues of change and development, and get attention and help from parents when needed.
   - The fear of falling is shown as a clasping motion that the baby makes when he is uncovered, surprised, or dropped. The baby cries out, which attracts a parent's attention and gets help.
   - The fear of strangers alerts the child to a new situation.
   - Fears appear during periods of new and rapid learning, such as when children learn to walk. New independence brings new things to fear, such as dogs, loud noises, and strange places.
   - By overcoming fears, children acquire confidence in their own new abilities.

WRITING (p. 555)

1. Key points:
   - Earthworms are causing significant damage to some forest ecosystems by destroying the soil cover; this contradicts the point in the reading that earthworms have a beneficial effect on the soil in forests.
   - There is evidence of earthworm damage near the shoreline of a lake, where the duff layer and wildflowers are disappearing; this contradicts the point in the reading that earthworms have a beneficial effect on the soil.
   - Worms are eating the forest floor right out from under the plants, which also has a negative effect on animals; this contradicts the points in the reading that earthworms have a beneficial effect and are an important link in the food web.

AUDIO SCRIPTS

PART 2 – LISTENING

01-LISTENING, Track 1

2.1 Identifying the Topic and Main Idea

Focus (p. 213)

Listen to a conversation in a university office.

W: Good afternoon. May I help you?
M: Hello. I'm thinking of taking Dr. Perry's class this summer—Intro to Political Science. And I was wondering … uh … is there a … do you happen to have a book list for that class?
W: I can check the computer to see if she submitted it yet.
M: Thanks. I'd appreciate it.
W: Did you say Introduction to Political Science?
M: Yes. For summer session.
W: Here it is, I found it. Oh … and it sure looks like a substantial amount of reading!
M: Really? Is it long?
W: Would you like me to print out a copy for you?
M: Yeah, that would be great!
W: All right. This will only take a few minutes.
M: Thank you. I really appreciate it.

What is the subject of the conversation?

01-LISTENING, Track 2

Exercise 2.1A (p. 215)

Question 1. Listen to a conversation between two students.

M: Hi, Kelsey! How's it going?
W: Well, I don't know. I just got my history paper back, and my professor didn't grade it. He just wrote on it, "Come and talk to me about this."
M: Really? Is that all he said? Didn't he make any other comments?
W: No. So I'm really confused. This is the first time I ever got a paper back with no grade on it.
M: That is strange, isn't it?
W: Sure is. I did everything I was supposed to. I mean, I followed the instructions of the assignment.
M: You'd better go talk to him. You need to find out what he's thinking.
W: Yeah, I will. I hope he doesn't ask me to rewrite the paper.

What is the woman's problem?

Question 2. Listen to a conversation between two students.

W: I don't know about you, but I sure am ready for spring break!
M: Are you doing anything special?
W: I'm going to Mexico to hang out on the beach! Four of us will be staying at a resort owned by Maria's family. How about you?
M: I wish I could do the same. Unfortunately, I told my brother I would help him move. But, I don't mind. It's my turn. He's done so much for me in the past.
W: Well, I'll be thinking of you as I bask in the sun.
M: Gee, thanks. I'll repay the favor some day!

What is the conversation mainly about?

Question 3. Listen to a conversation between two students.

M: What courses will you be taking next semester?
W: I won't be taking any courses. I'll be doing an internship instead.
M: Oh, really? Where?
W: At the Children's Union. It's a nonprofit agency that works on children's issues, like education, nutrition, crime, family issues—even music and the arts.
M: That sounds like a great experience because you want to work in that area.
W: Yes, I do, and I'm really excited. The position is actually very political. I'll be traveling all over the state, helping to organize events in a lot of different places. I may even get to spend some time in the state capital.
M: Excellent! I'm sure you'll learn a lot. Good luck!
W: Thanks. I hope this will lead to a job after graduation.

What is the woman mainly discussing?

Questions 4 through 5. Listen to part of a discussion between two students.

W: Are you ready for our first quiz in botany?
M: I guess so, if only I could remember the difference between xylem and phloem. I can't seem to get it straight on which one goes up and which one goes down.
W: I always think of a tree and imagine a "P" at the top, up in the branches, and an "X" at the bottom, down in the roots. "P" is above "X" in the tree, just as "P" comes before "X" in alphabetical order.
M: OK, now what?
W: Well, if "P" is up in the branches, it has to go down.
M: OK, then it's phloem that goes down.
W: Right. And "X" is down in the roots, so it has to go up.
M: Xylem is down, so it must go up. Xylem up, phloem down.
W: Right! Now just imagine your tree tomorrow during the quiz!

4. What problem does the man have?
5. How does the woman help the man?

01-LISTENING, Track 3

Exercise 2.1.B (p. 216)

Question 1. Listen to part of a talk given to first–year university students.

The place to go for parking permits is the Safety and Security Office on the first floor of the University Services Building. Parking permits are required for all on–campus parking. Special permits are available for students who carpool. You can also get passes for the Fourth Avenue Garage, bus passes, and maps there. The hours are 8:00 a.m. to 7:00 p.m. Monday to Thursday, and 8:00 to 4:00 on Fridays.

Safety and Security also provides special services 24 hours a day. These include escort service to and from your car, criminal incident reporting and investigation, lost and found, and battery jumper service.

What is the talk mainly about?

Question 2. Listen to part of a lecture in an American studies class.

Although the original American Indian cultures were highly diverse, they were similar in many of their traditions. Religious beliefs and rituals permeated every aspect of Indian life. Southwest tribes such as the Hopi and the Apaches had a rich and elaborate year–round sequence of ceremonials including songs, dances, and poetry. The Hopi performed dances to bring rain. The Apaches engaged in special dances and ceremonies to gain the support of the spirits before undertaking raids or going into war. The Plains tribes often sought contact with the spirits by going on a vision quest.

What is the topic of the lecture?

Question 3. Listen to part of a talk in a business class.

Each kind of insurance protects its policyholder against possible financial loss. Life insurance pays your family a certain sum upon your death. The purpose of life insurance is to provide your family with financial security, an immediate estate that will allow them to maintain the household after you die. Health insurance protects you against large medical expenses. When you pay premiums to your insurance company, you can ensure payment of your medical bills. Another kind, property–liability insurance, is sometimes called casualty insurance because it covers the cost of accidents—like automobile accidents, fire, and theft. If you're like most people, your home is the largest single investment you make in your life. This is why most homeowners have some type of property–liability insurance.

Which of the following best describes the organization of the talk?

Question 4. Listen to part of a lecture in a geography class.

The dunes called Spirit Sands make up the Manitoba Desert—Canada's only desert. These five kilometers of dunes were formed 10,000 years ago, when an ancient river dumped billions of tons of sand and gravel at the edge of a glacial lake.

The dunes of Spirit Sands are constantly changing … they are truly "rolling" dunes. Here's how it works. The sand in each dune becomes progressively finer toward the top. The heavier particles tend to settle at the base on the windward side. The wind blows the finer particles up the slope, and eventually they kind of trickle down the other side. Thus, the dune sort of walks downwind. It will reverse direction when the wind changes. Each dune is covered with tiny, rolling waves, and each wave itself is a tiny dune.

What is the lecture mainly about?

Question 5. Listen to part of a lecture in a biochemistry class.

There've been several influential studies in pain management. Some of the most interesting of these study endorphins, the body's own natural painkillers. For example, we now know that exercise stimulates the production of endorphins. Lack of exercise, on the other hand, not only shuts down endorphin production, but can also lead to muscle deterioration. This is why you see a lot of pain specialists prescribing exercise for patients with chronic pain.

Another interesting area involves the power of the placebo effect. We've known for some time that a sugar pill or other inactive placebo can sometimes make a sick person feel better. Somehow, the power of suggestion … or faith in the doctor, or the drug … will start a process of healing. We now think a neurochemical component—what may actually happen is the placebo effect allows some people to sort of tap into the supply of endorphins in their own brains.

What is the lecture mainly about?

01-LISTENING, Track 4

Exercise 2.1.C (p. 217)

Question 1. Listen to part of a lecture in a psychology class.

One study on aging suggests that the key to a longer life might be the way you think about yourself as you get older, that is, how you see your own aging. The researchers found that people who view aging positively live longer than people who view it negatively.

This study began 26 years ago and took place in a small town in the Midwest. The participants were 640 men and women who were 50 to 90 years old at the time. The subjects were asked to agree or disagree with statements about aging … for example, statements like "As you get older, you become less useful" and "Older people can't learn new skills." The data showed that respondents with the most positive attitudes survived a median of 22 years after their initial interview, while those with negative views lived just 15 years—a difference of seven years.

What is the speaker's main point?

Questions 2 through 3. Listen to part of a talk given by an academic adviser.

A bachelor's degree in engineering is the generally accepted educational requirement for most entry–level engineering jobs. In a typical four–year engineering program, the first two years are spent studying basic sciences—mathematics, physics, chemistry, and introductory engineering—and the humanities, social sciences, and English. The last two years are devoted to specialized engineering courses. Some programs offer a general engineering curriculum, letting students choose a specialty in graduate school or to acquire one later on the job.

Several engineering schools have formal arrangements with liberal arts colleges … programs, for example, where a student spends three years in a liberal arts college studying pre-engineering subjects and a couple years in an engineering school, and then … uh … receives a bachelor's degree from each school.

Now most engineers have some training beyond the bachelor's degree. An advanced degree is desirable for promotion, or is necessary to keep up with new technology. Graduate training is essential for most teaching and research positions.

Now a number of colleges and universities offer five-year master's degree programs offering an accelerated, intensive program of study. Some schools—particularly the state technical schools—have five- or six-year cooperative programs where students coordinate classroom study with practical work experience. These programs are popular because, in addition to gaining useful job experience, students can finance part of their education.

2. What is the speaker mainly discussing?
3. How does the speaker organize the information that he presents?

Questions 4 through 5. Listen to part of a talk in a health class.

W: RSI—repetitive strain injury—is probably the fastest-growing job-related illness. We hear about RSI so much today because of high-speed keyboard technology. Repetitive strain injury—also called repetitive motion syndrome—is a real problem for people who sit at the computer all day. RSI is brought on by doing the same movements with the arms and hands over and over again, all day long. This type of injury … RSI … it's … uh … been a problem for a long time for violinists, typists, mechanics, construction workers—anyone whose job involves repeated wrist movements.

M: My mother used to work in the lab at St. Peter's, and she got something like that. She worked there for around fifteen years—and it got to the point where she couldn't handle the instruments anymore. You could hear her fingers crack and pop when she moved them.

W: Hmm. Your mother may have had RSI—a serious case, from the sound of it. RSI affects different people differently. Some people get an inflammation of the sheathing around the tendons in the hand called tendonitis. The inflammation makes your fingers painful and hard to straighten. It's possible your mother's problem was tendonitis. A more serious condition that a lot of workers develop is carpal tunnel syndrome. That's when the nerves that go through the wrist to the hand are pinched by swollen tissue. The swelling causes a numbness or tingling sensation in the hand, and pain shoots up from the wrist—either up the arm or down into the hand. The pain can be so bad at night it wakes you up.

4. What aspect of RSI does the instructor mainly discuss?
5. How does the instructor develop the topic of RSI?

01-LISTENING, Track 5

2.2 LISTENING FOR DETAILS

Focus (p. 219)

Listen to a professor talk about hearing loss.

Long-term exposure to noise can lead to loss of hearing. The relative loudness of sounds is measured in decibels. Just to give you an idea of what this means, the sound of a whisper is 30 decibels, while a normal conversation is 60 decibels. The noise a vacuum cleaner makes is around 85 decibels.

The danger zone—the risk of injury—begins at around 90. Continual exposure to sounds above 90 decibels can damage your hearing. Loud noises—especially when they come at you every day—all this noise can damage the delicate hair cells in your inner ear. Lots of everyday noises are bad for us in the long run. For example, a car horn sounds at around 100 decibels. A rock band at close range is 125 decibels. A jet engine at close range is one of the worst culprits at an ear-busting 140 decibels.

The first thing to go is your high-frequency hearing, where you detect the consonant sounds in words. That's why a person with hearing loss can hear voices, but has trouble understanding what's being said.

Now choose the best answer to each question.

1. At what decibel level does the risk of hearing loss begin?
2. Which sounds could contribute to hearing loss?

01-LISTENING, Track 6

Exercise 2.2.A (p. 221)

Questions 1 through 2. Listen to a conversation between two students.

M: I had a lot of expenses this quarter, and the money my parents sent didn't last very long. I may have to get some kind of job.

W: You can probably find something right here on campus. You should check out the job board in the student center.

M: Where is that exactly?

W: In the student center, on the first floor, next to counseling. In fact, I think it's part of the counseling center. You can ask one of the counselors if you want more information about any of the jobs listed.

M: My problem is that I need the money but I don't have a lot of spare time. I'd like a quiet job that would allow me to get some reading done.

W: Then go on over there. Maybe there's an opening for night watchman.

1. What does the woman suggest the man do?
2. What type of job does the man want?

Questions 3 through 5. Listen to a conversation on a college campus.

M: Hey, Lorrie, are you doing anything on Wednesday afternoon?

W: I usually either go to the computer lab or go home after I get out of class. Why?

M: Well, we're having our annual book sale at the library, and we need extra cashiers.
W: When is the sale?
M: All day Wednesday, from ten until six. The busiest time will be from around noon to three. If you're free in the afternoon, why not volunteer to help us out? The library will give you ten dollars in book credit for every hour you work. You have to use the credit at this sale, but that will get you a lot of books. Most are priced around one or two dollars.
W: Why are you selling books from the library?
M: The sale includes mostly books people have donated to the library. There are a lot of paperbacks and things like encyclopedias.
W: Oh, I see. I guess I could spare a few hours.
M: Great! I can put your name down then?
W: Sure. I'll be there around noon.
M: Thanks, Lorrie!

3. What does the woman agree to do?
4. How are book sale workers compensated?
5. When will the woman arrive at the book sale?

Questions 6 through 7. Listen to a conversation between two students.

M: How do you like your classes this term?
W: All of my classes are really good. I especially like political science with Professor Hahn.
M: Oh, I had Professor Hahn for American history. We had to write a lot of papers. But one time we had a debate, and I'll never forget that.
W: Her assignments are challenging but useful. And she has the most interesting stories to illustrate her lectures. She really makes us think.
M: And she really makes you work in her class!
W: I know. But I'm starting to figure things out as a result of this class.
M: Great!

6. Why does the woman like her class with Professor Hahn?
7. What does the man say about Professor Hahn?

Questions 8 through 10. Listen to a conversation between a student and a professor.

W: Professor Abraham, did you want to see me?
M: Yes, please come in Nina, I have a job here that I hope you can help me with.
W: I'd like to, if I can.
M: Well, see this stack of paper? These are all journal articles that I need to go through for my research. It would really help if they were arranged more logically. Can you help me? I imagine it will take a few hours of your time.
W: Yes, of course I can. How do you want them organized?
M: Well, primarily by subject, and then by date. There are articles from the past four or five years. Most are about primate behavior, but a few deal with other mammals or birds, or with behavioral psychology in general.
W: This will be interesting. I have some free time tomorrow afternoon. Would that be all right?
M: That sounds perfect.

8. What does the professor want the woman to do?
9. What is the subject of the professor's research?
10. When will the woman do the work?

01-LISTENING, Track 7

Exercise 2.2.B (p. 222)

Questions 1 through 4. Listen to part of a discussion in an anthropology class.

M: The men of the northwoods tribes were the hunters. The hunting season began in the fall and continued until midwinter. These expeditions frequently took the hunters away from the village for long periods of time. Moose, deer, beaver, bear, and elk were the animals sought. Large deer drives were common, and small animals were taken with snares or the bow and arrow.
W: Did the women ever go hunting with the men?
M: The women often accompanied their husbands on hunting parties. Their job was to take charge of the camps.
W: Do you mean they just cooked for the men? I thought the Native Americans had more of a system of equality.
M: Overall, men and women shared the labor. On hunting expeditions, women basically supported the men, whose job was to procure the game. On the other hand, women controlled other realms of life. For example, women managed all of the agricultural operations. Also, a woman headed each clan, and these women were respected for their role as keepers of the clan.

1. When did the hunting season take place?
2. What animals did the northwoods tribes hunt?
3. According to the man, how did women participate in hunting?
4. Which activities did women control?

Questions 5 through 7. Listen to part of a talk in an introductory art class. The professor is talking about choosing a career in the arts.

M: Before you undertake a career in the arts, there are a number of factors to consider. Whether your goal is to be an actor or an animator, a saxophonist or a sculptor, talent is an essential consideration. But talent alone won't guarantee a successful career in the arts; you also need training, experience, and self-discipline. Most importantly, however, you should realize that a career in the arts requires a personal sense of commitment—a calling—because art does have a history of insecure employment. A lot of artists find it difficult—even impossible—to live on the money they make from their art. Most have to supplement their income by teaching, or by working behind the scenes, or by doing other work not related to the arts.
W: In your opinion, what's the best way for us to know if we really have a calling to art?
M: Well … those of you who are interested in art as a career should talk with arts professionals, or work in the arts yourselves. Professionals can give good firsthand advice, but experience is the best way to get a feel for the field.

W: What kind of experience? I mean … how do we get started?
M: Experience doesn't have to be formal. It can be part–time or volunteer work. For example, if you want to be a photographer or graphic designer, you could work for your school newspaper. Or if your interest is acting, you could start out in community theater. The important thing is getting started—spending time doing something in your chosen medium.

5. According to the professor, what factors are important in choosing a career in the arts?
6. According to the professor, why does a career in the arts require a special calling?
7. How does the professor suggest one get started in a career in the arts?

Questions 8 through 10. Listen to a discussion in a speech communications class.

W: For your speaking assignment, you will want to follow a logical series of steps in preparing for your speech. The first step, of course, is to realize the importance of the speech to you.
M1: But isn't that always the same in this class? After all, you give us an assignment and we want to get a good grade for it.
W: Yes, that's true, but the grade isn't the only thing that's important.
M2: Yeah, Paul, think of us, your listeners! We want you to believe in what you're saying!
W: Next, of course, you select your subject. Then, decide on your purpose. Do you simply want to inform us about your subject? Or do you want to influence us in some way? Write down a statement of exactly what you wish to accomplish in the speech. This is the first step in organizing your thoughts.
M1: Is entertainment a purpose?
W: It could be, yes. Your purpose could be to make your audience laugh.
M2: I expect you to be really funny, Paul!
W: After you decide on your purpose and organize your ideas, you are ready to develop your ideas interestingly and soundly. Why don't you all just take the next few minutes to start brainstorming? Jot down ideas that come to mind—things that matter to you, things you feel strongly about.

8. According to the instructor, what is the first step in preparing a speech?
9. What examples of purpose are mentioned in the discussion?
10. What does the instructor want the students to do next?

01-LISTENING, Track 8

Exercise 2.2.C (p. 224)

Questions 1 through 3. Listen to part of a talk in a geography class.

Now we'll turn our attention to a type of local wind known as the sea breeze. The sea breeze is the simplest, most widespread, and most persistent of local winds. The sea breeze results from the heating of land and sea along a coastline in near–calm conditions.

The more rapid heating of the land during the daytime results in the development of a temperature gradient across the coast. This leads to ascent over the land and descent over the sea. Thus, a pressure gradient causes a flow of air from sea to land.

At the same time as the breeze flows from sea to land, there is a return flow higher up, from land to sea. The airflow forms a circular pattern, from sea to land, upwards, and back out to sea. The flow develops through the day, and by the middle of the afternoon, may extend several kilometers inland.

At night, the situation is reversed and the flow is from the colder land to the warmer sea, as a land breeze.

1. What is the main topic of the talk?
2. Select the diagram that represents the sea breeze.
3. Identify the part of the diagram that shows the sea breeze's return flow.

Questions 4 through 5. Listen to part of a talk in a music history class.

The simplest type of horn is made from an animal horn, and animal horns are the model for other primitive horns made of shells, wood, animal hide, or clay. The sound is produced by vibrations from the player's lips. Now some horns are blown at the end, and some are blown on the side. Most primitive horns are end–blown. Unless the horn has finger holes, it will have a limited melodic range.

Horns have been around since very early times. In the Middle Ages in Europe, they were used almost exclusively in hunting and warfare. From about the fourteenth century onward, metal horns with special mouthpieces were developed, and this increased the horn's versatility. In the eighteenth century, the horn became a regular member of the orchestra.

Various types of horns are still widely used for signaling and ritual. The bugle is a simple horn dating from the Middle Ages that was first used for hunting and signaling. Starting in the nineteenth century, it became standard in military bands.

4. What topics does the speaker discuss?
5. When did the horn become a standard part of the orchestra?

Questions 6 through 10. Listen to a talk in an earth science class. The professor is talking about tsunamis.

The term "tidal wave" is often inaccurately used for a tsunami. Tsunamis have nothing to do with the action of tides. A more accurate term is "seismic sea wave." There has to be a disturbance of the earth's crust to produce a tsunami.

Large earthquakes with epicenters under or near the ocean are the cause of most tsunamis. Volcanic eruptions and undersea landslides are also responsible, but unless accompanied by movements of the ocean floor, their effects are usually localized. Possibly this was true about the eruption of Krakatoa in 1883. A tsunami was responsible for most of the deaths caused by Krakatoa, yet this tsunami did not sink any ships. It did wash away several coastal villages and kill more than 36,000 people.

Tsunamis work in complex ways. Some pounce on coastal settlements like large breakers. Others produce a gentle wave that floats buildings off their foundations. But then a violent backwash may sweep buildings and people out to sea. The tsunami that wrecked Hilo, Hawaii, in 1946 was so forceful it folded parking meters. It caused needless deaths when people returned to save their belongings and got caught between waves.

The deeper the water, the lower the tsunami and the faster it moves. In the open ocean, it travels at about 700 kilometers per hour, but being sometimes no more than a meter in height, a tsunami often passes a ship unnoticed. This is what happened in 1896 during a catastrophic tsunami in Japan, which was the result of an undersea earthquake. Thousands of people were drowned onshore, while fishermen far out at sea didn't notice the waves passing beneath their boats. But when they went home, they found their villages destroyed.

6. How does the professor develop the topic of tsunamis?
7. Why is the term "tidal wave" inaccurate for a tsunami?
8. What causes tsunamis?
9. What point does the professor make about the eruption of the volcano Krakatoa?
10. What is true of the tsunami that struck Japan in 1896?

01-LISTENING, Track 9

Exercise 2.2.D (p. 225)

Questions 1 through 2. Listen to a discussion between two students.

M: That was a pretty good history lecture, don't you think?
W: Well, to be honest, I didn't understand what Dr. Marquez meant by "partible inheritance," and it seems like that's an important thing to know.
M: Partible inheritance means that a man's property would be divided equally among all his children. After the man died, that is.
W: Oh. Then what's "primogeniture"?
M: That's when all the property goes to the eldest son. Just think about the word "primogeniture." "Primo" means "one" or "first," right?
W: Right. Oh, I get it! "Primogeniture" is when the first son gets everything.
M: That's right.
W: Now it's starting to make sense.

1. What are the students discussing?
2. What does "primogeniture" mean?

Questions 3 through 5. Listen to part of a discussion in a business class. The professor is talking about small businesses.

W: Small business owners usually consider themselves successful when they can support themselves solely from the profits of their business. So, why do so many small businesses fail each year? Well, for one thing, they usually face stiff competition from larger, more established companies. Large companies generally have cash reserves that enable them to absorb losses more easily than small firms can. Still, with the right combination of factors, a small business can do quite well.
M: My friend has a bicycle shop, and he runs the entire operation by himself. He buys the inventory, repairs bicycles, and sells to customers. He also builds the displays and cleans the shop—he does everything! And he manages to stay in business!
W: It is possible to make it—with hard work, good management, and a product or service for which there's a demand. A small business owner performs a lot of different tasks. It's absolutely essential to be a competent manager, as I'm sure your friend is. You also need to have a thorough knowledge of your field—a combination of formal education and practical training suited to your kind of business. To run a store, for example, you need to know how to keep track of your inventory—what you have to sell—and your accounts, so you need courses in accounting and business. Experience in retailing is helpful, too. Your primary responsibilities center on planning, management, and marketing, so organizational skills are a must. To keep your store in business, you have to adapt to changing market conditions. This means improving services or promoting your products in innovative ways.

3. According to the professor, why do many small businesses fail?
4. According to the professor, what is essential for success as a small business owner?
5. What are two responsibilities of a store owner?

Questions 6 through 10. Listen to a discussion between a student and a biology teaching assistant.

W: Hi, Gordon.
M: Hello, Julie. How are you?
W: Fine. I wonder if I could ask you a few questions.
M: Sure. What's on your mind?
W: Well, something happened—I mean I saw something happen—on a hike I did last weekend, and I was wondering if it sort of fit what we learned about muscle cells.
M: This sounds like it might be interesting. What did you see?
W: Well, I was hiking with my friend—on the desert canyon trail—and we ran into these two guys sitting by the side of the trail. It turns out they were part of a high school group. My friend and I stopped to talk to them, and it turns out that one of them was sort of having trouble. He said he'd been having leg cramps for about five hours.
M: Oh. That's not good on the canyon trail.
W: I know. We asked if they had water and food, and they said a little, but their teacher went back to get some more. The guy with the cramps said he didn't feel like eating. So, we gave them one of our water bottles, and we just went on. Later on, on the way back, we ran into them again. This time the teacher and the ranger were there. The guy was eating saltine crackers. It turns out he'd skipped breakfast that day.
M: Well that was a dumb thing to do! A strenuous hike in the desert is not the time to diet.
W: So, I wondered if his muscle cramps were because of what we talked about in class, because lactic acid ferments when the cell has no oxygen.
M: I'd say that's what happened with this young man. Do you remember why it happens?
W: Well, I know that human muscle cells make ATP by lactic acid fermentation when oxygen is scarce. It's what happens when … during exercise, when ATP production needs more oxygen than the muscles can supply. The cells then have to switch from aerobic respiration to fermentation. This means lactate collects in the muscle as a waste product, and that causes muscle pain.

M: That's absolutely correct. And the young man made his problem worse by not eating after he first experienced cramps. He was simply out of fuel. His teacher did the right thing by getting him to eat something salty.
W: I guess it's important to balance food and water intake.
M: That's right. Well, Julie, it looks like you saw biology in action!
W: Yeah! It's cool. I can really understand what happened.

6. What does the woman want to discuss with the teaching assistant?
7. Where did the woman meet the young man who had a problem?
8. What help did the young man receive?
9. Why did the young man experience muscle cramps?
10. What point does the teaching assistant make about what the woman saw?

01-LISTENING, Track 10

Exercise 2.2.E (p. 226)

Questions 1 through 5. Listen to a talk in an art class. The instructor is talking about pigments.

Whether you're working with oil, tempera, or watercolor, it's the pigment that gives the paint its color. A pigment can either be mixed with another material or applied over its surface in a thin layer. When a pigment is mixed or ground in a liquid vehicle to form paint, it does not dissolve but remains suspended in the liquid.

A paint pigment should be a smooth, finely divided powder. It should withstand the action of sunlight without changing color. A pigment should not exert a harmful chemical reaction upon the medium, or upon other color pigments it is mixed with.

Generally, pigments are classified according to their origin, either natural or synthetic. Natural inorganic pigments, also known as mineral pigments, include the native "earths" such as ochre—yellow iron oxide—and raw umber—brown iron oxide. Natural organic pigments come from vegetable and animal sources. Some examples are indigo, from the indigo plant, and Tyrian purple, the imperial purple the Romans prepared from a shellfish native to the Mediterranean.

Today, many pigments are synthetic varieties of traditional inorganic and organic pigments. Synthetic organic pigments provide colors of unmatched intensity and tinting strength. The synthetic counterparts of the yellow and red earths are more brilliant and, if well prepared, are superior in all other respects to the native products. Inorganic synthetic colors made with the aid of strong heat are generally the most permanent for all uses. In contrast, pigments from natural sources are less permanent than the average synthetic color.

1. What is a pigment?
2. According to the instructor, what characteristic should a pigment have?
3. How are pigments generally classified?
4. Which natural pigment did the Romans obtain from a shellfish?
5. According to the instructor, why are synthetic pigments superior to natural pigments?

Questions 6 through 10. Listen to part of a lecture in a geology class. The professor is talking about volcanoes.

A volcano is a vent in the earth which erupts when hot liquefied rock, or magma, moves to the earth's surface, pouring out as lava. The lava may flow out as a liquid, or it may explode from the vent as solid or liquid particles accompanied by superheated gases. Ash and cinders form a cone around the vent.

There are several types of volcanoes. The most fluid magmas erupt quietly and flow from the vent to form gently sloping shield volcanoes. The name "shield volcano" comes from their resemblance to the shields of early Germanic warriors. The lava flows from shield volcanoes are usually only one to ten meters thick but may extend for great distances from the vent. The volcanoes of Hawaii and Iceland are typical volcanoes of this type.

Cinder cone volcanoes are formed when magmas with high gas contents and high viscosity are blown high into the air during an eruption. The magma falls as volcanic bombs which accumulate around the vent and form steep–sided cones.

Calderas, large basin–like depressions, are formed when a violent eruption blows the top off of an existing cone or when the center of a volcano collapses. One famous caldera covers much of Yellowstone National Park. Six hundred thousand years ago there was a huge volcanic explosion which devastated the landscape. At the center there remained only a smoldering caldera, a collapsed crater more than forty miles wide. Yellowstone's famous geysers and hot springs lie within this giant basin.

6. What aspect of volcanoes does the professor mainly discuss?
7. Identify the types of substances that erupt from volcanoes.
8. Select the picture that is most like a shield volcano.
9. Select the picture that is most like a caldera.
10. Which type of volcano is associated with the geysers in Yellowstone National Park?

01-LISTENING, Track 11

QUIZ 1 (p. 230)

Questions 1 through 5. Listen to a discussion in a business class.

M1: The computerized workplace can be hazardous to your health if you don't take preventative measures. Today we'll go over what some of these hazards are, and more importantly, what can be done about them. One major complaint—maybe the biggest complaint—of people who spend time at the computer is eyestrain. To help ease the strain on the eyes, the computer screen should be about two feet from your eyes. The entire screen should be in focus. The brightness and contrast should be adjusted for best readability. A good way to relieve eyestrain is to look away from the screen frequently. Focus your eyes on objects that are far away, like something outside—the building across the street or the tree in the parking lot.
W: But what if your office doesn't have a window? I mean, I've worked in lots of places where there's no window.

M1: Then in that case, you need to get up and walk around. You should never sit for more than 30 minutes at a time anyway. This is important for the rest of your body as well, namely your back. Neck and back pain are a big problem for computer people. Always make sure your screen, keyboard, and chair are at the right height for you.

M2: I think it's important to have a comfortable chair, one that sort of shifts your weight a little bit forward. I put a cushion on my chair, and that really helps my lower back.

M1: That's not a bad idea. The right chair is a must, the right posture as well. Remember what your mother told you—sit up straight, with your feet on the floor. Another thing I wanted to talk about is air pollution in the workplace—sorry, did you have a question, Martha?

W: I've heard that copy machines are bad for you. Is there anything to this?

M1: Photocopy machines aren't a health hazard for people who use them only occasionally. But for people who use them a lot, there can be bad effects. For example, people who handle the toners can get skin rashes. If you handle the toner, you should pour it in slowly, to avoid spreading the dust, and always wash your hands afterward. Another problem—if the machines are in an area that's not well ventilated—is ozone.

W: Ozone! No kidding!

M1: It's true. Almost all photocopiers give off some ozone. However, the amount is usually less than what's considered hazardous. Most machines have an ozone filter, but this can still leak if the machine's not properly maintained. If you can smell a sort of electrical odor coming from the machine, it's a sign that it's giving off too much ozone.

1. What is the discussion mainly about?
2. What does the instructor recommend for relieving eyestrain?
3. According to the discussion, why is it important to have the right chair?
4. According to the instructor, what health problem is associated with copy machines?
5. Where in the workplace might ozone be a problem?

Questions 6 through 10. Listen to a talk in a drawing class.

Today we'll begin our discussion on perspective, or how to represent three-dimensional forms on a two-dimensional surface. The basic rules of perspective date back to the early Renaissance and are still used today. Perspective can be challenging when you're first learning to draw from observation, but it's essential to grasp if you want your drawings to represent the visual world as you see it. An understanding of perspective is mandatory for anyone who does representational drawing. This includes professionals in a variety of fields—interior design, illustration, architecture, industrial design, and fine arts, to name a few.

Simply put, perspective allows us to differentiate between objects of different sizes and at different distances from the viewer. It enables us to see immediately what the relationships are. The fundamental principle is that objects appear smaller as their distance from the observer increases. For instance, someone across the street appears smaller than the person standing next to you. Someone down the street looks even smaller, someone farther away looks smaller still, and so on. Think of buildings in a landscape … the cross-ties of railroad tracks … the cars on a train. These are just a few things we know are approximately equal in size, yet seem to diminish with distance because of perspective.

Everything in perspective is related to the concept of eye level—the horizontal line at the level of your eyes as you turn your head from side to side. Another related concept is the vanishing point. The vanishing point is a point at eye level where parallel lines going away from you appear to come together and then vanish. When you draw a building, for example, the vanishing point makes the building sort of recede in space and grow smaller. Yet, in reality, you know the sides of the building are parallel. If lines are drawn along these sides, they will converge at a distant point—the vanishing point.

In real life, the eye level is rarely visible, and vanishing points virtually never are. Yet you should—it's important for you to always work with an awareness of them. This is why I advise you to sketch eye level and vanishing points in every drawing, at least temporarily. Eye level and vanishing points will help you convey perspective. As you gain an understanding of perspective, you'll find that your work is more confident and you're better able to create a finished drawing from your sketches.

6. What aspect of perspective does the instructor mainly discuss?
7. According to the instructor, which fields require an understanding of perspective?
8. Select the drawing that illustrates the concept of perspective.
9. Identify the part of the drawing that represents the vanishing point.
10. What does the instructor advise the students to do?

02-LISTENING, Track 1

2.3 DETERMINING ATTITUDE AND PURPOSE

Focus (p. 232)

Listen to part of a conversation between a student and an academic adviser.

W: Hi, Greg. Um…do you have a minute?

M: Nicole. Hello. I have … uh … about twenty minutes. Come in and sit down.

W: Thanks. I wanted to talk about the school psychology program. I've been thinking about this for a while, and I've decided to change my major to counseling.

M: Really? It's quite a change from being an accountant to being a counselor!

W: I know. It's funny, isn't it? All my life I thought I wanted to run my own business someday. But this year I've been working as a volunteer tutor—at Garfield Elementary—and I'm just so impressed with what the counselors are doing there.

M: Did you say Garfield?

W: Yes, where those kids in the accident went to school. That was terrible, that accident. It was such a shock to the whole school. But it was eye opening for me. I had a chance to observe some of the counselors talking to the kids, helping them deal with the tragedy. They—the counselors, that is—they were so, so … they were really amazing. It really got me thinking about … about how to make … how to help people heal. I started thinking, "This is something I'd like to do."

Now choose the best answer to each question.

1. Why does the student go to see her adviser?
2. What is the student's attitude toward the school counselors that she observed?

02-LISTENING, Track 2

Exercise 2.3A (p. 235)

Questions 1 through 2. Listen to a conversation between a student and a professor.

M: Professor Park?
W: Hello, Tony. How can I help you?
M: Professor Park, I have a problem. My father had to have surgery, and I have to go to Oklahoma. I don't know how long I'll be gone. I was wondering if I could take an Incomplete for your class.
W: I'm so sorry to hear about your father. Of course you can take a grade of Incomplete. It means you would have six weeks to make up the term paper and the final exam. There is also a form that you need to fill out that I have to sign.
M: I've got the form right here.
W: Oh, then why don't we take care of it right now?

1. Why does the student go to see his professor?
2. What is required for an Incomplete?

Questions 3 through 5. Listen to part of a conversation that takes place in the student services office of a university.

M: Excuse me, I'm looking for Janice.
W: I'm Janice. What can I do for you?
M: The cashier in the cafeteria sent me here. I'd like to change my meal plan.
W: What plan do you have now?
M: Two meals a day, breakfast and dinner. But I have an early morning class three days a week, and I don't have time to eat breakfast in the cafeteria.
W: What, no breakfast? That's not good!
M: Oh, I still eat! We take turns bringing doughnuts or bagels to have at the break.
W: Glad to hear it. So … uh … what you have now is Plan B. And what did you want to do?
M: Well, I was thinking of switching to dinner only, if I can do that, and get a refund for the breakfast I don't eat.
W: Do you know about Plan C?
M: Plan C?
W: It's for lunch and dinner, and costs only $20 more than Plan B.
M: Oh, really? Hmm. That sounds like a good deal.

3. What is the purpose of the conversation?
4. Why does the woman say this:
"What, no breakfast? That's not good!
5. Why does the woman tell the man about Plan C?

Questions 6 through 7. Listen to a conversation between a student and a professor.

W: Professor Curtis, may I ask you something?
M: Of course.
W: My daughter was sick yesterday, and I had to stay home with her. I was wondering—could I make up the quiz?
M: I usually don't do that for quizzes, only for tests.
W: But I'm concerned this will affect my grade. I need to do well in this class.
M: Then I've got an idea. If you want to show me what you've learned, give me a one–page report, summarizing the most important thing you got out of the chapter.
W: Oh, I can do that. That's even better than a quiz. Thank you, Professor Curtis.

6. Why does the student speak to the professor?
7. What does the professor suggest the student do?

Questions 8 through 10. Listen to a telephone conversation between two graduate students.

W: Hello.
M: Leona? This is Jaspar.
W: Hi! I've been waiting for you to call. Could you get Dr. Bryant for next week?
M: Dr. Bryant is on sabbatical, but Professor Slocum says he'd be happy to visit our class.
W: I don't know Professor Slocum.
M: He's an expert on the natural history of the region and has written several books on the topic. I think he'll be an excellent addition to our seminar.
W: Good work, Jaspar! This assignment to invite a guest speaker has turned out to be harder than I thought.
M: But it's a great assignment, and besides, everyone has to do it. Look at all the professional contacts we're making!
W: You're right, it's very useful. Thanks, again, and I'll see you tomorrow!

8. What are the speakers mainly discussing?
9. Why does the man say this:
"He's an expert on the natural history of the region and has written several books on the topic. I think he'll be an excellent addition to our seminar."
10. What is the man's opinion of the assignment?

02-LISTENING, Track 3

Exercise 2.3B (p. 236)

Questions 1 through 2. Listen to part of a discussion in a writing class.

M: You probably noticed in your reading for this week that all the stories involved cases of miscommunication between people. You probably also noticed that a lot of this miscommunication was due to cultural differences. This is all good stuff, and so I thought it would be a good idea if this week's journal theme were along the same lines. What I'd like you to do is think and write about a time when you—or someone you know—experienced some type of miscommunication. It could be any kind of problem in conveying or in understanding a … Yes?
W: But isn't this the same as last week? I mean, I feel I've already written a lot about it. I had to do something like this in two of my other classes too. Can't we write about something else for a change?
M: What did you have in mind?

W: I mean, I'm getting tired of writing about my life. And I don't feel qualified to write about any of my friends' problems.
M: Then why not focus on someone you don't know personally? For example, a scene in a movie or a television show.
W: Oh. I can do that?
M: Of course. What's important is your awareness of—that you can recognize instances of miscommunication.

1. What is the main purpose of the discussion?
2. What is the woman's attitude toward the assignment?

Questions 3 through 6. Listen to part of a talk in a United States history class. The professor is talking about economics in colonial New England.

W: We know that in colonial New England, the Native Americans—compared to the European colonists—had a far greater knowledge of what resources in the environment could be eaten or made useful. Native Americans used a wide range of resources for economic subsistence, and these resources were simply used by the family that acquired them. Only a few resources were accumulated for the purpose of showing a person's social status—for example, shells, furs, and ornaments of the hunt.
M: Excuse me, Dr. Singer, but did they … um … did the Native Americans have a concept of wealth?
W: The Native Americans believed a person's status came more from kinship and personal alliances than from stores of wealth. Their definition of "need" was what they needed to survive. So if they had food, clothing, and shelter, they considered themselves wealthy. For the European colonists, on the other hand, resources in the environment were seen more as commodities, as goods that could be exchanged in markets. European economies measured commodities in terms of money values—abstract equivalencies that could be accumulated and could function as indicators of wealth and social status. So, for the colonists, "need" was defined by the markets that bought New England goods. So the Europeans perceived few resources in New England ecosystems, but they saw many commodities—fur, fish, timber—which could be sold in the marketplace for profit.

3. What is the main purpose of the talk?
4. What does the professor say about the Native Americans' use of resources?
5. Listen again to part of the discussion. Then answer the question.
   "Excuse me, Dr. Singer, but did they … um … did the Native Americans have a concept of wealth?"
   "The Native Americans believed a person's status came more from kinship and personal alliances than from stores of wealth. Their definition of "need" was what they needed to survive. So if they had food, clothing, and shelter, they considered themselves wealthy."
   Why does the professor say this:
   "So if they had food, clothing, and shelter, they considered themselves wealthy."
6. Why does the professor say this:
   "So the Europeans perceived few resources in New England ecosystems, but they saw many commodities—fur, fish, timber—which could be sold in the marketplace for profit."

Questions 7 through 10. Listen to part of a talk in an anthropology class. The professor is discussing culture.

M: What would human life be without culture? It's impossible for us to imagine what we'd be like without language, without art or religion or technology. Over hundreds of thousands of years of evolution, these aspects of our cultures have become as much a part of us as our anatomy and physiology. We have a lot in common with the people around us. In fact, the number of ideas we have in common with nearby people is very large. A complete list of shared ideas—for example, ideas we share with our own—the people around us—this list would include our ideas about what's right and wrong, what's beautiful and ugly, and so on … also our ideas about food, work, love, marriage—every aspect of our lives—even our rules about how to behave toward strangers, friends, animals, and the earth. Think of a particular group of people—any group—say, for example, college students. If you could take all the ideas and behaviors, all the tools and technology, all the things that college students share as a result of being in contact with each other, you'd have what anthropologists call student culture.
W: So, what you're saying is culture is sort of like a club. College students are a club. It's because our experience is … like, we go to class, we do homework, we have our computers and cell phones, we hang out with other students. Sometimes we forget what the outside world is like. This is why—that's what we have in common with other students—it's why our culture makes us feel like part of a club, right?
M: Hmmm. In a way a culture is like a club—neighboring cultures might share the same ideas and rules, like neighboring clubs do. But the comparison doesn't completely cut it. Think about it. A club has borders that we can define—but we run into trouble if we try to draw borders around a culture. Culture isn't a thing. It's an idea. Still—even though the idea of culture is problematic—some of us believe that by continuing to study cultures, we will eventually be able to explain the similarities and differences among us.

7. What is the purpose of the talk?
8. Why does the professor mention student culture?
9. What is the woman's attitude toward student culture?
10. What does the professor think of comparing a culture to a club?

02-LISTENING, Track 4

Exercise 2.3.C (p. 237)

Questions 1 through 2. Listen to part of a talk in a business management class.

Management requires a great deal of energy and effort—more than most people care to make. One factor that affects managers and inhibits their capacity to provide leadership is stress. Stress has lots of causes—work overload, criticism from workers—and can have negative health effects, including loss of sleep.

It's a fact: managers have to deal with stress. Some handle it by making time to be by themselves. Most have some favorite place or pastime—a beach to walk on, maybe a stream to fish in, or a game to play with the kids. It's important to have some form of rest and relaxation—creating art, working with your hands, gardening, playing sports—the list goes on. Rest doesn't always mean inactivity. For some people, exercise is rest.

1. What is the main purpose of the talk?
2. What is the professor's opinion of rest?

Questions 3 through 6. Listen to part of a lecture in a psychology class. The professor is talking about clinical psychology.

In order to know how behavior patterns can be changed, the clinical psychologist has to know what causes the client to behave the way he or she does. Identifying the cause is called diagnosis. In diagnosis a psychologist uses two basic tools: interviews and psychological tests. Through interviews and tests, the psychologist tries to classify the problem to see if it falls into any known categories.

A psychologist may also attempt to describe the client's personality in terms of how he or she deals with life. For example, some people like to lead, and some prefer to follow the lead of others. Some people are active and outgoing, while others are quiet and reflective.

In a diagnostic interview, the psychologist takes the client's case history. This means learning how the client got along with parents, teachers, and friends, as well as how the person handled difficult situations in the past.

Psychological testing is the other way that a psychologist tries to diagnose the client's problems. Clinical psychologists have developed tests that can help them learn about a person's intelligence and personality, as well as tests that show whether a person's behavior or perception is influenced by emotions, disabilities, or other factors.

Personality testing is useful in discovering how the client tries to adjust to life. Personality tests can reveal unconscious feelings the person is unable to talk about. This information can be important and could help shorten the length of treatment required.

3. What is the purpose of the lecture?
4. How do clinical psychologists diagnose a client's problems?
5. Why does the professor discuss taking a client's case history?
6. According to the professor, why are personality tests useful?

Questions 7 through 10. A public health officer has been invited to speak to a biology class. She will be discussing bats. Listen to the beginning of the talk.

Now that the warmer weather and longer days are here, we aren't the only ones spending more time outdoors. This is an active time for bats as well. Migratory bats are now returning to the area, and young bats are starting to explore their environment. Young bats go off course, and this is when most people come into contact with them.

Bats are a normal part of our environment and can even be a good thing. Bats help keep down the insect population, especially mosquitoes. Normal bat activity includes sleeping during the daytime and becoming active and flying around in search of food at night, starting at dusk. It's unusual to see a bat during the day. Normal bats don't fly around in the daytime, or lie or crawl on the ground, so if you encounter a bat like that, you should call the health department immediately.

If you have bats in your attic or house, contact a pest control agency. They do not kill the bats, but make recommendations on how to get the bats out of your home. You'll want to create a one–way valve from your house to outside so they can get out but can't come in. To avoid having bats in your house altogether, find all possible entry points into the house and close them by caulking or screening the gap. Bats can squeeze through a gap of one–half inch.

Bats are the most likely carriers of rabies in our area, and almost one hundred percent of rabies cases are fatal. Make sure your dogs and cats are vaccinated against rabies. If you should come in physical contact with a bat, it's important to get in touch with the health department or a doctor immediately. If possible, catch the bat so it can be tested for rabies.

7. What is the main purpose of the talk?
8. Why does the speaker say this:
   "Bats help keep down the insect population, especially mosquitoes."
9. How can you prevent bats from entering your house?
10. Why does the speaker recommend getting medical advice if you come in physical contact with a bat?

02-LISTENING, Track 5

Exercise 2.3.D (p. 238)

Questions 1 through 5. Listen to part of a lecture in an anthropology class. The professor is discussing humor and laughter.

Being amused is a condition we're all familiar with, but what exactly is a sense of humor? Well, it's something very personal, and yet we communicate it to others by laughing. Laughter is a universal human expression. All normal human beings can laugh. Children as young as one month old will laugh. People often laugh together, and people laugh louder and more frequently when other people around them are also laughing. Every comedian knows this, and research has confirmed it.

Physically, laughter is an involuntary tensing of the chest muscles, followed by a rapid inhalation and exhalation of breath—a mechanism that releases tension. For most people, a good laugh is welcome—and worth looking for—because it brings pleasure and relief.

Human adults everywhere in the world enjoy making their children laugh. Adults make playful attacks on their children, tickling, teasing, and even pretending to bite them. Adults will throw small children up in the air and catch them again. This causes the child to experience mild stress, but in a secure setting because the stress is carefully controlled by the parent. And when the child laughs, it's a signal that he or she has successfully dealt with mild feelings of insecurity. This teaches the child about the shocks and fears that are part of human life, and which every human eventually has to deal with. This element of shock in an otherwise safe situation is a universal characteristic of situations where people laugh.

Our sense of humor allows us to tell stories about situations we haven't experienced firsthand. We call these little stories "jokes." We tell jokes to show our frustration with the society we live in, especially its … well, its rules. Social rules

and conventions provide us with a range of situations that we can turn into humor. And the things we joke about—the conventions and rules we live by—are sort of tense areas in our society, they're areas where we can see the need for change. Humor gives us the power to think about changing the rules. Making jokes and laughing are safe ways to change our social rules and conventions. Therefore, comedians—whether they know it or not—are agents of social change.

The ability to laugh is a vital part of being human. People who laugh together—or laugh at each other's jokes—feel close to each other. Laughter creates a sense of connection. Humor can also help us deal with anxieties that we can't escape. Failure, fear, pain, and death—they're all real to us, as they are to no other animal on Earth. And without a sense of humor, it would be difficult for us to live with everything we that know about the world.

1. According to the professor, why do most people welcome laughter?
2. Why does the professor say this:
   "Adults make playful attacks on their children, tickling, teasing, and even pretending to bite them. Adults will throw small children up in the air and catch them again."
3. Which of the following is a universal characteristic of situations where people laugh?
4. Why does the professor talk about social rules and conventions?
5. Listen again to part of the lecture. Then answer the question.
   "The ability to laugh is a vital part of being human. People who laugh together—or laugh at each other's jokes—feel close to each other. Laughter creates a sense of connection. Humor can also help us deal with anxieties that we can't escape. Failure, fear, pain, and death—they're all real to us, as they are to no other animal on Earth. And without a sense of humor, it would be difficult for us to live with everything that we know about the world."
   Why does the professor say this:
   "And without a sense of humor, it would be difficult for us to live with everything that we know about the world."

Questions 6 through 10. Listen to part of a lecture in a horticulture class. The professor is talking about roadside beautification.

There's always been tension—throughout our history—a kind of tension between private development and government regulation, especially when it comes to development of land for agriculture.

Catherine Parr Traill—a botanist who lived in the nineteenth century—she predicted that the natural beauty of Canada's wilderness would disappear because of agricultural development. She wrote in 1868 that the wilderness was, quote, "destined to be swept away, as the onward march of civilization clears away the primeval forest … and turns the waste places into fruitful field," unquote.

But, fortunately for us, Catherine Parr Traill's prediction turned out to be not entirely true. The Quinte Wildflower Project proves that people can come together to preserve the beauty of the wilderness. This project continues a trend to beautify North American highways that goes all the way back to the 1960s and the beginning of the Adopt–a–Highway programs, the programs that use volunteers to clean up the litter along roadsides. Since the sixties, beautification programs have been … um … broadened to include the planting of native flowers and shrubs.

In Canada, a lot of time and money were being spent mowing the grass on roadsides. Weeds and wildflowers alike—all were sprayed with herbicides to kill them off. Eventually, the high cost forced the government to stop spraying and mowing. Since the 1980s, Ontario has turned to volunteers and private sponsors for roadside beautification.

The Quinte Wildflower Project is the largest roadside planting of wildflowers in Ontario. The project was born in 1996, with the help of private sponsors and government horticulturists. Areas along an 18–kilometer stretch of Highway 401—from Trenton to Belleville—were … um … most of the sites were planted with one of two native wildflower seed mixtures. Both seed mixtures produce flowers that require little maintenance and are hardy enough to survive roadside conditions. Each seed mixture contains several different species, so wildflowers bloom, so there's a steady show of colors from June to October.

The Quinte Wildflower Project has been a huge success. Its greatest success has been in attracting both public interest and private sponsors. It demonstrates that government and citizens can work together … that partnerships between the public and private sectors can and do work.

6. How does the instructor develop the topic of roadside beautification?
7. Why does the professor quote botanist Catherine Parr Traill?
8. Why does the professor mention the Adopt–a–Highway programs that began in the 1960s?
9. Why does the professor say this:
   "Each seed mixture contains several different species, so wildflowers bloom, so there's a steady show of colors from June to October."
10. What does the professor think of partnerships between government and private citizens?

02-LISTENING, Track 6

QUIZ 2 (p. 244)

Questions 1 through 5. Listen to a conversation between two students.

W: Am I ever glad to see you! We don't have much time left before our presentation—only the rest of this week. Let's talk about what we still need to do.
M: Do we have that much left to do? I was under the impression we're just about ready. I've got all my data, the graphs and photos of the mountain.
W: Let's—we'd better go over what we have.
M: Oh, sure, but I have hockey practice in half an hour.
W: This won't take long, I hope. Now, I'll do the introduction. First, I'll talk about how the geologists at Volcano Watch detected another tiny earthquake on Stone Peak two weeks ago. The quake registered only point 8, but they think it could be part of a series of small quakes that precede an eruption. Then I'll give the history of the eruptions in that area.
M: How far are you going to go back?
W: Two thousand years. That's the last time Stone Peak erupted. I won't go over every little eruption, just the six or seven major ones in the range. Then … I guess at that point I'll turn it over to you.
M: And I'll show my graphs—no, maybe the pictures first, at least this one of the bulge. George Davidson at the observatory gave me all these photographs. I

still have to make slides out of 'em, and of my graphs, too, but that won't take long. Aren't they awesome? Some are really good shots of the mountain—you can really see how much the bulge has grown.

W: It's grown … how much, a few inches?

M: A few inches a year, for the past six years. The bulge is forming 'cause a chamber of magma below the surface is growing. Earth's crust is being bent and bent—a few inches a year is a lot of bending—and sooner or later, it'll start to break open. Then there'll be a show! First I'll show them—first the color picture, then the graphs showing the eruptions over the past six years … and then the series of black-and-white photos showing the bulge. It shows up better in black and white.

W: Then … when you're through with the slides, we should probably allow enough time for questions.

M: Yeah, that sounds good. That should about wrap it up. See? We're all set to go.

1. What are the students discussing?
2. Listen again to part of the conversation. Then answer the question.
   "Let's—we'd better go over what we have."
   "Oh, sure, but I have hockey practice in half an hour."
   Why does the man say this:
   "Oh, sure, but I have hockey practice in half an hour."
3. What types of data will the students use in their presentation?
4. What is the man's opinion of the photographs?
5. According to the man, why is a bulge forming on the mountain?

Questions 6 through 10. Listen to part of a talk in an economics class.

One very important institution in our economy is the bank. Banks manage money for individual people, corporations, and the government. Banks provide a number of important services for you and your family. Most importantly, they're a safe place to store your money. They also provide an easy way for you to transfer money from one place to another.

When you write a personal check, the check authorizes the bank to give your money to the person or business whose name is on the check.

Of course, banks also lend money. Ordinary people take out bank loans for a number of reasons—to pay for college, to buy or remodel a home, to start or expand a business, and so forth. Banks provide these services to individuals; however, their main function is to lend large sums of money, for example, to corporations. When people or corporations borrow money from a bank, they must, of course, pay interest—a percentage of the money they borrowed.

Banks pay interest on the money they hold, and charge interest on the money they lend.

For a bank to make a profit, it has to collect more interest than it pays out.

Sometimes banks invest money as well as lend it. To invest money means to put it into a corporation or some other project—for example, building a housing complex or doing medical research—in exchange for a share of the profits. Most businesses need loans and investments at some time, and banks are an important source of both.

You might wonder what would happen if all the people with money in a bank wanted to take their money out at the same time. I mean, how would the bank be able to give everyone their money, if it had lent out or invested most of it? In fact, this can be a serious problem for banks. They count on the fact that most people won't want their money for a long time once it's deposited. That leaves the bank free to lend or invest the money. If every person—or even lots of people—tried to withdraw their money at the same time, the bank might not be able to honor all of its deposits. This causes some banks to fail, or go bankrupt.

Bank failures used to be common during times of recession or depression. They were especially common during the Great Depression of the 1930s. When Franklin Roosevelt became president in 1933, one of the first things he did was close all the banks, so depositors wouldn't panic and try to take all their money out.

6. What is the main purpose of the talk?
7. For what reasons do individuals take out bank loans?
8. How do banks make a profit?
9. Why does the professor say this:
   "If every person—or even lots of people—tried to withdraw their money at the same time, the bank might not be able to honor all of its deposits."
10. Why were banks closed during the Great Depression of the 1930s?

02-LISTENING, Track 7

QUIZ 3 (p. 246)

Questions 1 through 5. Listen to a conversation between a student and a professor.

M: Excuse me, Dr. Kilmer. Do you have a minute?

W: Hello, Darren. Come on in, have a seat. What can I do for you?

M: Well, it's about my midterm grade for organizational psychology. I … I'm surprised it's so … low. I feel like I've been working pretty hard in this class.

W: I see. Well, let's go back and have another look at each of your assignments … here we go. OK, I've pulled up your record. Hmm … you had a "C" on the midterm exam and a "B" on your first assignment.

M: Yeah, that was the paper about the interview. I talked to a woman at a bio-research firm.

W: Yes, I remember that paper. You must have learned some useful things. But unfortunately, Darren, I don't have any record here for the second and third assignments. They were due on October 1st and the 13th.

M: I know … but I've been sort of busy. My younger brother's starting classes here in January, and I have to show him around and help him find a place to live. He's staying with me for now, but he doesn't have a car, so I have to drive him.

W: Can't your brother take the bus some of the time? After all, your coursework should be your priority.

M: Uh, it's really hard. He is my brother, and he's had some problems in the past. My parents want me to help him get settled. They live two thousand miles away.

W: I see. That does make it tough.

M: I'd like to … Would it be all right if I made up those two papers? I started the first one, but I just didn't get everything typed up.
W: Yes, of course you can make up the work, but it would be best if you did that as soon as possible. Remember, these short papers, together with the long term paper, count for 50 percent of your final grade.
M: I know. And I need my final grade to be better than my midterm grade. Don't worry. I'll get it together. I really like this class … I just have to get more organized.
W: Well, good luck, Darren. I'm glad you came to talk to me.
M: Thanks, Dr. Kilmer. I appreciate your time.

1. Why does the student speak to his professor?
2. What reason does the student give for not completing his assignments?
3. When were the assignments due?
4. What point does the professor make about the student's work?
5. Why does the student say this:
   "Don't worry. I'll get it together."

Questions 6 through 10. Listen to part of a lecture in a communications class.

Researchers study television to understand its effects on viewers and to measure its effectiveness in selling products. Much of the research on TV audiences is market research, paid for by corporations with something to sell. Let me repeat: research on television is funded largely by advertisers.

The television industry depends on advertising money to survive, and this relationship influences what television offers viewers. Advertisers aim to reach mass audiences and specific social groups. In turn, the television industry tries to meet the needs of advertisers, because pleasing the advertisers is nearly as important as pleasing the public. This means advertisers have a lot of control over what programs are made and when they are shown.

The American television industry is controlled by people who are more interested in the culture of consumerism than in preserving cultures or natural resources. I mean, for the first time in history, most of the stories children learn don't come from their parents or schools; they come from a small number of large corporations with something to sell. And this culture of consumerism is exported to other countries.

Television is the most effective marketing tool ever created. Many advertisements apply basic psychology by sort of appealing to our insecurities and desires. Ads convince us that the things we once thought were luxuries are now necessities. Television is highly skilled at creating images of affluence, not just in the ads, but in the programs as well. Using sophisticated market research, programmers and advertisers sort of paint a picture of life centered on material possessions. This kind of life may look glamorous and desirable, but it's all at the expense of personal relationships.

As you probably can tell, I tend to agree with critics of the media. Advertising does create false needs, and products we really need don't require advertising. Television promotes consumerism. It shows us things, things, and more things. It encourages greed and envy. Television helps create a wasteful society, where things are thrown out long before they are worn out.

6. What is the main idea of the lecture?
7. According to the professor, why do researchers study television?
8. According to the professor, why do advertisers have control over television programming?
9. Listen again to part of the lecture. Then answer the question.
   "Television is highly skilled at creating images of affluence, not just in the ads, but in the programs as well. Using sophisticated market research, programmers and advertisers sort of paint a picture of life centered on material possessions. This kind of life may look glamorous and desirable, but it's all at the expense of personal relationships."
   Why does the professor say this:
   "This kind of life may look glamorous and desirable, but it's all at the expense of personal relationships."
10. What is the professor's opinion of television?

03-LISTENING, Track 1

2.4 MAKING INFERENCES AND PREDICTIONS

Focus (p. 248)

Listen to a conversation between a student and a professor.

W: Professor Elliott, did you read the draft of my paper yet?
M: Why hello, Amy. Uh, yes, I did read it. As a matter of fact, I wanted to talk to you about it. I'm glad you stopped by. I think I have your paper … here we go, I have it right here.
W: Is there something wrong with it?
M: No, not terribly, but … I can't tell where you're going with it.
W: Oh. I'm not sure I understand.
M: Let me put it like this. You start out strong. In fact, your introduction is done quite well. You really get your teacher interested in technology and society and how they're related and all. The middle part, too—where you interview the engineer—that, that's very engaging. Lots of good and original ideas. But after that … well, I'm lost. What does it all mean? It just gets a little vague.
W: Oh, I think I see what you mean. Do you mean my conclusion's not clear?
M: Well, it's a little too open. You need to tie it all together … leave your reader with one clear thought, one new way of thinking about technology.
W: Oh well, I see. Um … maybe I'd better work on that part some more. I really appreciate your comments. This helps me a lot. Thanks, Professor Elliott.
M: My pleasure. Any time.

Now choose the best answer to each question.

1. What does the professor imply about the student's paper?
2. What will the student probably do?

03-LISTENING, Track 2

Exercise 2.4.A (p. 252)

Questions 1 through 2. Listen to a conversation between a student and his adviser.

M: Excuse me, Mrs. Lyons, do you have a minute?
W: Yes, how are you, Bruce?
M: Fine, I guess. But I'm having a hard time keeping up in geometry. I think I'd better get out of the class and try again next quarter.
W: Let's have a look at the preliminary list for next quarter. Hmm. I'm afraid geometry won't be offered again in the spring.
M: Oh, no.
W: If you feel your workload is too heavy now, why not drop your history class? You could easily get that course again. It's offered every quarter.
M: Oh, all right. If I drop history, maybe then I'll be able to catch up in geometry. Thanks, Mrs. Lyons.
W: You're welcome, Bruce. Good luck!

1. Why does the student go to see his adviser?
2. What will the student probably do?

Questions 3 through 4. Listen to a conversation between two students.

M: I ran into a problem when I tried to register by telephone. I got a message that said I had an outstanding charge on my account that needed to be paid before I could complete my registration.
W: What does that mean?
M: I'm not sure. A recorded voice just said I had to go to the Student Accounts Office.
W: Do you have any idea what it could be about?
M: The only thing I can think of is last quarter my roommate broke the shower door in our suite, and maybe they billed me by mistake.
W: Oh, I'll bet that's expensive. You'd better go to the accounting office and try to clear it up.
M: Yeah, and I'd better make sure my roommate pays for the damage. I do need to register for next quarter.

3. What is the man's problem?
4. What will the man probably do?

Questions 5 through 7. Listen to a conversation between a student and a professor.

W: Professor Pollard?
M: Yes?
W: I've … um … I registered for your psychology course for summer session. But I have to go to Vancouver and won't be back until June 25.
M: Oh. That means you'll miss the first week.
W: I know. Could I … um … make up the work when I get back?
M: That would be kind of a problem. It's like this … we'll cover the important basics during the first week. And you'll be forming study groups and starting to plan your research projects. The first group report is due on the 25th.
W: Would I still be able to join a group?
M: I don't think that would be fair to the others in your group. Summer session is only six weeks, and you can't afford to get a late start.
W: That's OK. I understand. Will you teach this course again in the fall?
M: Yes. In fact, in fall semester there'll be two, maybe three sections.

5. Why does the student go to see her professor?
6. What does the professor imply?
7. What will the student probably do?

Questions 8 through 10. Listen to a conversation between two students.

M: I haven't seen you around lately. Where have you been hiding yourself?
W: I live off campus now, in Forest Glen.
M: Oh, those are the apartments in Glenwood that the university owns, right?
W: Right, and would you believe they don't cost much more than the dormitories?
M: I didn't realize that. But how did you manage to get in Forest Glen? I thought it was just for married students.
W: Three of the buildings are for married people only, but anyone can live in the rest. And the best part of it is I can ride the city bus for free! All I had to do was show my rent receipt to the transit company, and they gave me a bus pass that's good for the whole semester!
M: Maybe I'll look into that. I might save some money on parking.
W: Why not? The apartments are nice and spacious, and you wouldn't even need your car.

8. What are the students mainly discussing?
9. What can be inferred about the woman?
10. What will the man probably do?

03-LISTENING, Track 3

Exercise 2.4.B (p. 253)

Questions 1 through 2. Listen to an art instructor talk about composition.

Composition is the organization of shapes and forms into a whole—an expressive whole. The elements of composition—line, shape, tone, and color—need to be well arranged, need to be ordered. They need to be coherent … just like the words and phrases and sentences in a piece of writing.

All paintings have a compositional element. Successful paintings sort of suggest the third dimension, the sense that the design goes beyond the picture frame. A picture's unity—which includes the shapes, tones and colors—is linked to what the artist has to say. The artist's message is strongest when it's clear. A composition is better if it says one thing strongly than if it tries to say too many things. A crowded composition is sort of fussy and splintered and lacks unity. Even a painting of a single object needs thoughtful composition so the character of the object is present in every shape.

1. What does the instructor imply about composition?
2. Would the instructor most likely agree or disagree with each statement below?

Questions 3 through 6. Listen to part of a talk in a biology class.

Biology is considered one of the natural sciences. It is the science of life and life's processes. And like life, science is better understood by observing it than by trying to create a precise definition. Over the next fifteen weeks, we will be observing the science of biology.

In many ways, biology is the most demanding of all sciences. This is partly because living systems are so complex. Biology is also a multidisciplinary science. It requires knowledge of chemistry, physics, and mathematics. And of all the sciences, biology is the most linked to the social sciences and humanities.

The word "science" comes from a Latin verb meaning "to know." Science is a way of knowing. It emerges from our curiosity about ourselves and our world. Striving to understand is one of our basic drives.

Who are scientists? Scientists are people who ask questions about nature and who believe that these questions can be answered. Scientists are explorers who are passionate about discovery.

This course has something for all of you to discover. If you're a biology major or a pre–medical student, you'll discover ways to become a better scientist. If you're a physical science or engineering major, you'll discover in biology many applications for what you've learned in your other science courses. And if you're a non–science major, you've chosen a course in which you can sample many disciplines of discovery.

3. What is the main purpose of the talk?
4. According to the professor, why is biology the most demanding of all sciences?
5. What does the professor imply about scientists?
6. What is probably true about the students in this course?

Questions 7 through 10. Listen to a lecture in a botany class. The professor is talking about plant hormones.

The word "hormone" is derived from a Greek verb that means "to excite." Hormones are found in all multi–cellular organisms and function to coordinate the parts of the organism. A hormone is a chemical signal. It's produced by one part of the body and is then transported to other parts of the body, where it triggers responses in cells and tissues.

The concept of chemical messengers in plants first emerged from a series of classic experiments on how plant stems respond to light.

Think about this. A houseplant on a windowsill grows toward light. If you rotate the plant, it will soon reorient its growth until its leaves again face the window.

The growth of a plant toward light is called "phototropism." In a forest or other natural ecosystem where plants may be crowded, phototropism directs growing seedlings toward the sunlight that powers photosynthesis.

Some of the earliest experiments on phototropism were conducted in the late nineteenth century by Charles Darwin and his son, Francis. The Darwins observed that a grass seedling could bend toward light only if the tip of the shoot was present. If the tip was removed, the shoot would not curve toward light. The seedling would also fail to grow toward light if the tip was covered with an opaque cap.

The Darwins proposed the hypothesis that some signal was transmitted downward from the tip into the part of the stem that controlled growth. Later experiments by other scientists studying phototropism led to the discovery of chemical messengers that stimulated growth in the stem. These chemical messengers were hormones.

7. What do plant hormones do?
8. Which picture illustrates phototropism?
9. Which grass seedlings would probably NOT bend toward light?
10. What can be inferred about the tip of a plant's stem?

03-LISTENING, Track 4

Exercise 2.4.C (p. 254)

Questions 1 through 2. Listen to a conversation between two students.

W: Have you finished your paper for anthropology yet?
M: No, I haven't even started. I'm having trouble coming up with a good idea. We're supposed to describe the cultural characteristics of a group, but any group I can think of would seem too artificial. I don't know much about any one cultural group.
W: Of course you do. Write about your own culture!
M: But that's my problem. I don't really have a culture.
W: That's ridiculous! Everyone has a culture. What about the culture of your family? Or your high school? Or your hometown?
M: I grew up in a small town where almost everyone works in the orchards.
W: Bingo! Write about the culture of the orchard community.
M: I never thought of that. Well, why not? It's something I know a lot about.

1. What is the man's problem?
2. What will the man probably do?

Questions 3 through 4. Listen to a conversation between a student and a professor.

M: Professor Martin, I will have to miss class tomorrow. My great aunt passed away and her funeral is tomorrow.
W: Oh, let me offer my condolences to you and your family.
M: Thank you. My aunt was a wonderful lady. Ah, so would it be possible for me to take the test next week?
W: Of course. Eric handles all make–ups. He's the instructional aide for our department. Can you stop by the office today and make an appointment with him?
M: Sure. Would he be there now?
W: He should be. He works every day.
M: Then I'll do it right now. Thank you, Professor Martin.
W: You're welcome, Jerry. Take care.

3. Why does the professor say this:
"Oh, let me offer my condolences to you and your family."
4. What will the student probably do next?

Questions 5 through 7. Listen to a conversation between two students.

M: I can't believe how much my books cost this semester! I just spent over one hundred dollars in the university bookstore, for only four books! And I still need the book for chemistry. That one costs fifty–five dollars! It's a little more than my budget can handle at the moment.
W: Science books are always out of sight. But did you know there's another bookstore in the Pioneer District? They carry used copies of most of the textbooks for the university.
M: I wonder if they'd have my chemistry book. I need the third edition.
W: I found all of my books there. You can sell any kind of book, too, not just textbooks.
M: That's not a bad idea. Where did you say that was again?

5. What is the man's problem?
6. What can be inferred about the man?
7. What will the man probably do?

Questions 8 through 10. Listen to a conversation in a campus pharmacy.

W: Hello. I'm here for an allergy medication. The nurse sent me—I think her name was Margaret—in the student clinic. She said I didn't need a prescription, and that you would know the right medication. It's for allergies, for my itchy nose and burning eyes. I've been having sneezing fits, and it's driving me crazy.
M: All right. I think she means the new product, the really strong one.
W: Maybe that's the one. She says it really works for allergies.
M: All right. We have—you have a choice actually of capsules or tablets. There's no difference in price.
W: It doesn't matter. Hmm … capsules, I guess.
M: All right. Now, this is a powerful drug, so you need only—no more than two capsules every six hours. And you shouldn't drink alcohol, drive a car, or operate machinery.
W: Uh oh! I have a big test tomorrow! I don't know … if this is going to make me drowsy … Do you have anything else that's effective but won't knock me out?
M: Nothing that will relieve your symptoms like this drug. Why don't you—you could take two capsules three or four hours before your test. That way, the drug's still working, but the drowsiness has mostly worn off when you take your test.
W: OK. Well, I guess I have no choice. I can't start sneezing during the test.

8. What does the man imply about the medication?
9. Listen again to part of the conversation. Then answer the question.
"Uh oh! I have a big test tomorrow! I don't know … if this is going to make me drowsy … Do you have anything else that's effective but won't knock me out?"
Select the sentence that best expresses how the woman probably feels.
10. What will the woman probably do?

03-LISTENING, Track 5

Exercise 2.4.D (p. 255)

Questions 1 through 2. Listen to a conversation in a university office.

W: Hello. May I help you?
M: Yes, I hope so. My name is Harry Burke. I got a message from someone in this office saying I still needed to pay a lab fee.
W: Let me check. Harry Burke. Oh, yes. The computer shows that you haven't paid the lab fee for your biology class. You'll need to do this before you can attend your lab section.
M: I didn't know there was a lab fee. I don't remember seeing it on my bill.
W: Did you register after September 15?
M: Uh, I think so.
W: The fee probably didn't show up on your bill because you registered late. I'm afraid you'll have to pay it at the cashier's office.
M: OK, I'd better take care of it right away. Thanks for letting me know.

1. What problem does the man have?
2. What will the man probably do next?

Questions 3 through 4. Listen to a conversation between two students on a field trip.

W: Look! Isn't that a house finch?
M: No, I think it's just a little brown sparrow.
W: It seems reddish to me. And its song is like a recording we heard of a house finch. Professor Flynn said we'd probably see a lot of red finches today.
M: Well, maybe you're right. We'd better write it down anyway. But I still say it's too brown to be a house finch. I'll put a question mark by it.
W: We've sure seen enough starlings. I didn't even know they lived in the city. I can remember hearing my cousin complain about how the starlings always ate all the fruit in their orchard.
M: They are kind of pretty, though, don't you think? Look at how the black is mixed with a little green, making their feathers look iridescent.

3. What are the students discussing?
4. What can be inferred about starlings?

Questions 5 through 7. Listen to a conversation between a student and the physics department secretary.

M: Hello. May I leave a message here for Dr. Owada?
W: Yes. I can give her a message, or if you've written her a note, you can put it in her mailbox over there.
M: I didn't write her a note, but I can. May I sit here and write it?
W: Sure. Oh, I just realized that Dr. Owada isn't on campus today because she had a conference to go to. She'll get the message tomorrow. Would that be all right?
M: I was going to tell her I wouldn't be in class today, but maybe I don't need to now. Is her two o'clock class canceled?
W: No, Professor Strong will be giving the lecture today.

M: Oh, it's too bad I'll miss that. He's a great speaker. Well, thank you for your help.
W: It's OK. Have a nice day.

5. Why does the student want to leave a message for Dr. Owada?
6. What does the secretary imply about Dr. Owada?
7. What will the student probably do?

Questions 8 through 10. Listen to a discussion in a history class.

W: Did anyone happen to catch "The American Metropolis" last night? It was about the growth of cities.
M: I didn't see that, but I did see part of a documentary last week that told about a guy—I think he was a visitor from another country—who wrote a book about the growth of industry and so on—the things we've just studied. I remember he said there was a huge population explosion that turned America into a nation of cities, all within a decade. He was talking mostly about Baltimore.
W: Baltimore then or now?
M: In the nineteenth century, right after the Civil War.
W: The program you saw was part of the same series as the one I want to tell you about. Last night the topic was New York City. As early as 1880, the federal government wrote a report on how the five separate municipalities of New York actually constituted one vast metropolitan area. It was a progressive way of thinking at the time. And within twenty years, those five municipalities were officially united as a single city, by a vote of the people. To this day, however, each borough maintains traces of its original independence.
M: I agree with that. I'm from Brooklyn, and it's definitely different from the rest of New York.

8. What are the people discussing?
9. What can be inferred about the United States in the nineteenth century?
10. What can be inferred about New York City?

03-LISTENING, Track 6

Exercise 2.4.E (p. 256)

Questions 1 through 2. Listen to part of a talk in a science class.

As you recall from our previous discussion, the chemistry of life is organized into metabolic pathways. Next year, in your organic chemistry lab, you'll go into this—into metabolism—in more depth. Since this is an intro course, you need only a general understanding of the process for now.

There's a wonderful videotape I'd like you to know about that will help you review for the test next week. It's part of the "Transformations" series that was on television about a year ago. The episode you should watch is called "The Industry of a Cell." I strongly urge you to see it. I believe our library has more than one copy.

It shows lots of examples—the many ways that cells use energy for metabolism. For example, it shows how bacteria in the "headlight" of a certain fish—how these bacteria take the energy stored in food and convert it into light, in a process called bioluminescence. You should all try to see this program before next week. I highly recommend it. In fact, you can expect to see examples from it on the test.

1. What can be inferred about the course in which the talk is given?
2. What does the professor imply about the videotape?

Questions 3 through 6. Listen to an instructor give a talk about jazz.

The origins of jazz are as richly textured as the music itself. The term "jazz" really covers many different kinds of music. In the late nineteenth century, African Americans began performing the folk music known as the blues, whose origins lay in the work songs of slavery days. Within the African–American community, the blues evolved into popular commercial music.

In 1914, a black orchestra leader named W.C. Handy wrote the "St. Louis Blues." Adapting the African–American folk idiom to European conventions of orchestration and harmony, Handy produced a hit song. The "St. Louis Blues" was tremendously influential among black and white musicians, and Handy's style of music became famous under the name of "jazz."

Early jazz musicians were active in many cities and towns throughout the southern United States. It was New Orleans—with its long tradition of African–American music—that was the home of many "fathers" of jazz. After World War One, the musicians of New Orleans joined the general northward migration of African Americans. The first great national center of jazz was Chicago. From there, the music entered the mainstream and even gave its name to the decade of the 1920s.

Jazz, blending African–American folk roots with elements of popular music and European classical traditions, has been called "America's classical music."

3. For which course would the talk be most appropriate?
4. What does the instructor imply about the style of music known as the blues?
5. According to the instructor, why is the song "St. Louis Blues" significant?
6. Based on the information in the talk, indicate whether each statement below accurately describes jazz.

Questions 7 through 10. Listen to part of a lecture in a marine biology class.

Land animals move easily through air, because air does not slow them down. Sea creatures, on the other hand, have to move through water, which is hundreds of times thicker than air. A sea animal has to push itself through water in order to move.

Sea animals use many different ways to swim, creep, or glide through water.

Fish are able to swim by bending their bodies into waves. They have flattened fins and tails that push against the water like oar blades, converting their body waves into forward movement. The size of a fish's tail contributes to its swimming speed. Small tail fins are found in slow swimmers like the eel. The medium size tail of the bass is linked with a medium–to–fast swimming speed. Long, pointed tail lobes, like those on the marlin, are found only on fast swimmers.

Sea mammals like whales and dolphins swim in a very fish–like way, except for one important difference. Because their ancestors lived on the land, they developed tails that

moved up and down. Whales and dolphins wave their tails up and down rather than side to side like fish do.

The seahorse is a fish whose tail is not used for swimming at all. The seahorse uses its thin, coiled tail to attach itself to seaweed, like a monkey's tail holds onto a tree branch.

Squids and octopuses move in a completely different way. They use a type of jet propulsion—shooting water out through a nozzle to force themselves along.

And then there are the creatures that live on the bottom of the sea. Sea slugs, limpets, and whelks creep on a single flat piece of muscle called a foot. Ripples pass along the foot, which allows these animals to glide smoothly forward.

7. What is the main purpose of the lecture?
8. Select the drawing of the creature that is probably the fastest swimmer.
9. Listen again to part of the lecture. Then answer the question.
   "Sea mammals like whales and dolphins swim in a very fish–like way, except for one important difference. Because their ancestors lived on the land, they developed tails that moved up and down. Whales and dolphins wave their tails up and down rather than side to side like fish do."
   What is probably true about whales and dolphins?
10. What can be inferred about creatures that live on the bottom of the ocean?

03-LISTENING. Track 7

QUIZ 4 (p. 261)

Questions 1 through 5. Listen to a conversation in a university office.

M: Jackie, I wonder if I could talk to you about something.
W: Sure. What's on your mind?
M: There's an opening at channel 12 that kind of interests me—an internship. I was kind of thinking of applying for it.
W: You mean the television station? What sort of job? Oh, I hope that doesn't mean you'll have to leave us!
M: No, no, I wouldn't quit my job. It's a part–time internship for production assistant. Production work, general stuff … probably mostly I'd be a gofer.
W: I see.
M: Anyway, it'd be a way in the door. Unfortunately, it's not a paid internship, but that doesn't matter. It's the experience—the chance to work in television—that's more important to me right now. Some day I'd like to write, or produce. I probably don't stand much of a chance, though. I'm sure there'll be lots of other people who apply, with more qualifications than me.
W: Don't be so sure about that. You never know. Sometimes it's not the credentials but the person who matters. My friend got a really good job in the mayor's office—public relations, a power position—and before that the only work she'd done was emergency rescue—evacuating people in helicopters! Flood victims, accidents and the like. And then she goes and lands this glamour job in the mayor's office, with no experience in politics whatsoever!
M: Wow!
W: Yeah. So you can never tell.
M: Still, I'm going to need all the help I can get. If only I could … uh … convince them of how much—I need them to know how much this would mean to me. I was wondering, Jackie, if you….
W: You want a recommendation?
M: Uh, yeah, like I said, I need all the help I can get.
W: I'd be happy to do what I can. I feel I know your work pretty well. Here in the lab you've always been good at troubleshooting, and helping people figure out their e–mail. I can emphasize that in the letter. When do you need this?
M: Um … by the end of the week? The application is due next Tuesday.
W: All right, Alex. I hope this will work out for you.
M: If not this, then something else.
W: There you go. That's the spirit!

1. What is the conversation mainly about?
2. Why does the man want to get the internship?
3. Listen again to part of the conversation. Then answer the question.
   "I probably don't stand much of a chance, though. I'm sure there'll be lots of other people who apply, with more qualifications than me."
   Select the sentence that best expresses how the man probably feels.
4. Why does the woman tell a story about her friend?
5. What does the man want the woman to do?

Questions 6 through 10. A naturalist has been invited to speak to the members of a college hiking club. Listen to part of the discussion.

W1: Because of their protected status, a lot of bears have lost their fear of people. This may make them appear tame, but they're still potentially very dangerous. Bears are wild animals. One or two bear attacks occur each year in Glacier Park. The majority of attacks occur because people have surprised the bear.
M: What should we do if we surprise a bear?
W1: You should try to avoid encounters in the first place by being alert. And make noise. Talk loud. Holler. Bears will usually move out of the way if they hear people approaching.
W2: Some people say to carry bells, or put bells on your pack.
W1: Most bells—even the so–called bear bells—are not loud enough. Calling out or clapping hands at regular intervals are better ways to make your presence known.
M: But isn't it kind of rude to make a lot of noise in the woods? I mean, people go there for peace and quiet.
W1: In bear country, noise is good for you. Hiking quietly endangers you, the bear, and other hikers. People sometimes assume they don't have to make noise while hiking on a well–used trail. Some of the most frequently used trails in Glacier Park are surrounded by excellent bear habitat. You can't predict when and where bears might appear along a trail.
M: That's for sure. I remember my surprise when a black bear charged me. It must have been running away from hikers who surprised it on the trail ahead of me.
W1: Don't assume a bear's hearing is any better than your own. Some trail conditions make it hard for bears to see, hear, or smell approaching hikers. You should be especially careful near streams, against the wind, or in dense vegetation. Stay with your group and, if

possible, avoid hiking early in the morning, late in the day, or after dark, when bears are more likely to be active. Bears spend a lot of time eating, so avoid hiking in areas like berry patches or fields of glacier lilies.

W2: How will the bear act if we surprise it?

W1: Bears react differently to each situation. They may appear to tolerate you, and then attack without warning. The most important advice I can give you is never to approach a bear intentionally. Each bear will react differently, and its behavior can't be predicted. All bears are dangerous and should be respected equally.

6. What is the discussion mainly about?
7. What does the naturalist think of bear bells?
8. Listen again to part of the discussion. Then answer the question.
   "Don't assume a bear's hearing is any better than your own. Some trail conditions make it hard for bears to see, hear, or smell approaching hikers. You should be especially careful near streams, against the wind, or in dense vegetation."
   Why does the naturalist say this:
   "You should be especially careful near streams, against the wind, or in dense vegetation."
9. What can be inferred about the behavior of bears?
10. Which situations should hikers avoid?

03-LISTENING, Track 8

QUIZ 5 (p. 263)

Questions 1 through 5. Listen to a professor lead a discussion in a biology class.

W1: In our last meeting we discussed how science is a process. Science involves the formation of a hypothesis and the testing of that hypothesis through observation and experimentation. We use this process to answer our questions about nature. Today we'll focus on science and technology. Technology, especially in the form of new instruments, can extend our ability to observe. Technology enables us to work on questions that were previously unapproachable. In turn, technology often applies the discoveries of science. Can anyone think of an example? Yes, Rosa?

W2: The inventors of the electron microscope used electromagnetic theory from physics.

W1: The electron microscope is an excellent example of applied science. But not all technology can be described as applied science. In fact, technology came before science in our prehistory. Technology was driven by inventive humans who built tools, made pottery, designed musical instruments, and so on, all without science—that is, without people necessarily understanding why their inventions worked.

M1: Technology might not be science, but I think technology mostly helps us. It enables us to cure diseases so people can live longer.

W2: But look at the environmental consequences, like global warming and holes in the ozone.

M2: Not to mention nuclear accidents, toxic waste, extinction of species—technology can't save us from ourselves.

W1: You're all raising some very important issues. Technology has improved our standard of living in many ways, but technology is a double-edged sword. Science and technology are partners. Science can help us identify problems and provide insight about what course of action may prevent further damage. But solutions to these problems have as much to do with politics, economics, and culture as with science and technology.

M1: I think scientists have a responsibility to educate politicians and the public about the consequences of certain technologies. This is why I'm a science major now, but I've decided to get a master's degree in public policy.

W1: And a decision like that is important. Scientists should try to influence how technology applies the discoveries of science.

1. What is the discussion mainly about?
2. What does the electron microscope provide an example of?
3. Why does the professor mention tools, pottery, and musical instruments?
4. Listen again to part of the discussion. Then answer the question.
   "You're all raising some very important issues. Technology has improved our standard of living in many ways, but technology is a double-edged sword."
   What does the professor mean by this statement:
   "...technology is a double-edged sword"?
5. Why does one of the students plan to get a master's degree in public policy?

Questions 6 through 10. A forester has been invited to speak to a group of students. Listen to part of the talk.

M1: No matter whether we live in the country, the suburbs, or the city, we come in contact with forests every day. A combination of trees, other plants, insects, wildlife, soil, water, air, and people is a forest. I'm a professional forester. That means I've been trained in the management of forests. Managing a forest is both a science and an art, which is why my education included courses in the biological, physical, and social sciences, as well as the humanities.

W: Doesn't being a forester mean you always work in the woods?

M1: Foresters, of course, do work in the woods. More and more, however, they also work in laboratories, classrooms, planning agencies, corporate offices, and so forth. In fact, our professional organization, the Society of American Foresters, lists over 700 job categories.

M2: I've always been confused about the difference between a national park and a national forest. In a lot of ways they're similar. For example, we can camp and hike in both.

M1: There is a difference between them. National parks, such as Yellowstone, are set aside and preserved in a near-natural state, mainly for the recreational enjoyment of the public. Our parks are administered by the Department of the Interior. National forests, on the other hand, are administered by the Department of Agriculture. Our forests are managed for their many benefits, including recreation, wood products, wildlife, and water.

M2: That means there's a difference between a forester and a park ranger, right?

M1: Yes, there are differences. A forester manages an area of forest for forest products, water quality, wildlife, recreation, and so on. A park ranger, on the other hand, manages an area in a national or state park, mainly for recreation. Another difference is who owns the land. A forester can work on federal, state, or private land, while a park ranger is almost always a government employee.

W: My major is biology, but I'd like to work in the woods in the area of wildlife preservation. Would that make me a forester or a biologist?

M1: Some foresters are primarily biologists. But most foresters majored in forestry management. Foresters and wildlife biologists often work together as a team. Both foresters and biologists want to see that various types of habitat flourish. Deer, for example, require a different habitat than wolves—yet the forest can accommodate them both.

6. What is the talk mainly about?
7. What can be inferred about the profession of forestry?
8. Why does the student say this:
   "I've always been confused about the difference between a national park and a national forest. In a lot of ways they're similar. For example, we can camp and hike in both."
9. Listen again to part of the talk. Then answer the question.
   "National parks, such as Yellowstone, are set aside and preserved in a near–natural state, mainly for the recreational enjoyment of the public. Our parks are administered by the Department of the Interior. National forests, on the other hand, are administered by the Department of Agriculture. Our forests are managed for their many benefits, including recreation, wood products, wildlife, and water."
   What can be inferred about national parks?
10. Listen again to part of the talk. Then answer the question.
    "My major is biology, but I'd like to work in the woods in the area of wildlife preservation. Would that make me a forester or a biologist?"
    "Some foresters are primarily biologists. But most foresters majored in forestry management. Foresters and wildlife biologists often work together as a team. Both foresters and biologists want to see that various types of habitat flourish."
    Why does the forester say this:
    "Both foresters and biologists want to see that various types of habitat flourish."

04-LISTENING, Track 1

2.5 CATEGORIZING INFORMATION

Focus (p. 265)

Listen to part of a talk in a geography class.

Each biome is characterized chiefly by the dominant forms of plant life and the prevailing climate. The largest biome on Earth is the taiga. The taiga—also known as boreal or evergreen forest—is a broad band across North America, Europe, and Asia. Winters are long and cold, and summers are short, wet, and sometimes warm. Precipitation here is mostly in the form of snow.

Moving northward, we have the arctic tundra here, which extends northward from the taiga and circles the North Pole. The tundra is the northernmost … uh … limit … for plants to grow. The vegetation is mostly … uh … sort of shrubby, low, mat–like plant forms. And about 20 percent of Earth's land surface is tundra.

We also have alpine tundra, a biome found on high mountaintops. Alpine tundra occurs in all latitudes. That means even in the tropics, anywhere the elevation is high enough. Here, above the tree line, strong winds and cold temperatures create plant communities similar to those of the arctic tundra.

Match each biome with the correct description.

04-LISTENING, Track 2

Exercise 2.5A (p. 268)

Question 1. Listen to a musicologist talk about drums.

Drums can be divided according to shape. Some of the types are tubular, vessel, and frame drums.

One of the most common tubular drums is the long drum. A lot of long drums are cylindrical—they have the same diameter from top to bottom—like this Polynesian drum. This drum was carved from a length of tree trunk and has a single–skin head.

For vessel drums, we have the kettledrum. Kettledrums have a single membrane stretched over a pot or vessel body. Vessel drums come in a variety of sizes, from the very large drums of Africa to the very compact and portable drums like this one from Hawaii.

The third type I want you to see is the frame drum. A frame drum consists of one or two membranes stretched over a simple frame, which is usually made of thin wood. The frame is shallow, which adds little resonance when the skin is beaten. A lot of frame drums—like this Turkish tar—have metal jingles attached to the rim.

Match each type of drum with the correct picture.

Questions 2 through 3. Listen to a biology professor talk about caves.

The interior of a cave is divided into three zones. The entrance zone may serve as a place of shelter for animals or people. Prehistoric humans used entrance zones of caves as shelters and burial grounds. Therefore, such zones are of interest to archaeologists, as they provide clues to the habitat of early human beings.

The next zone is called the twilight zone. The twilight zone is sheltered from direct sunlight and is home to a large, diverse population of animals such as salamanders, bats, and during severe winters, bears.

The third zone, the dark zone, is the true cave environment. Perpetually dark, it has only slight seasonal changes in temperature, few if any air currents, and a constant relative humidity of nearly 100 percent. In the dark zone live animals that have adapted to the world of darkness, including small shrimp, beetles, spiders, and fish. These animals are usually blind, and some lack eyes altogether. Since no green plants grow in caves, these animals depend largely on food that is washed in by streams or mud.

2. Which creatures have lived in each cave zone?
3. Indicate whether each item below characterizes the dark zone of a cave.

Questions 4 through 5. Listen to a psychology professor talk about personality types.

The theory of personality types suggests there are pairs of what are known as "type preferences." Type preferences are not the same as character traits that can be worked on and changed. Rather, they're preferred ways of being in the world, different … uh … different ways of …uh … experiencing daily life. One well–known pair of type preferences is extraversion–introversion. Some people are extraverts and some are introverts.

Extraverted people are—by nature—continuously aware of events outside of themselves. Extraverts turn outward—to the world around them—to pick up … uh … ideas, values, and interests. Extraverts, therefore, usually have a variety of interests and sort of take an active approach to life.

Introversion is the just the opposite. Introverts look inward for resources. Introverts pursue fewer interests, but on a much deeper level. They sort of take a reflective approach to life. What I mean is, they involve themselves in inner events, ideas, and impressions. Introverted people usually prefer to learn in private, individual ways.

4. Indicate whether each phrase below describes an extravert or an introvert.
5. What type of assignment would an introverted student probably prefer?

Questions 6 through 10. Listen to a talk given by an economics instructor.

One of the major problems in our economy is inflation, a situation in which prices are going up faster than wages. Thus, a person has to work more hours to pay for the same items.

For example, let's say that this year a loaf of bread costs $1.00 and the average salary in the United States is $10.00 per hour. That means a person could earn enough money to buy a loaf of bread in one–tenth of an hour, or six minutes. Then, halfway through the year, the price of the bread goes up to $1.25, while wages stay the same. That means that a person now has to work one–eighth of an hour—seven and a half minutes—to buy the same loaf of bread.

Now let's say that at the end of the year, wages go up to $11.00 per hour, but the price of bread goes up to $1.50. Now a person has to work more than one–seventh of an hour—over eight minutes—to buy the same loaf of bread. As you can see, if more and more work time is spent earning money to buy loaves of bread, employees will have less money left over to buy other things. Inflation means that the same money buys fewer things, and everybody's standard of living goes down, even if salaries are going up.

Some kinds of inflation are worse than others. Moderate inflation does not distort relative prices or incomes severely. Galloping inflation happens rapidly, say at a rate of 100 percent or more within a year. And then there is hyperinflation—inflation so severe that people try to get rid of their currency before prices rise further and render the money worthless. Times of hyperinflation are usually characterized by social and political turmoil.

6. What is the main purpose of the talk?
7. Why does the instructor talk about a loaf of bread?
8. What happens when prices go up but salaries remain the same?

9–10. Based on the information in the talk, indicate whether each sentence below describes moderate inflation, galloping inflation, or hyperinflation.

04-LISTENING. Track 3

Exercise 2.5.B (p. 269)

Questions 1 through 5. Listen to a career counselor talk about two different types of employees.

Are you going to be more effective and happy as a specialist or as a generalist? Do you find real satisfaction in the precision, order, and system of a clearly laid–out job? Or are you one of those people who tend to grow impatient with anything that looks like a "routine" job?

There are a great many careers in which the emphasis is on specialization. You find these careers in engineering and in accounting, in production, in statistical work, and in teaching. But there is an increasing demand for people who are able to take in a great area at a glance. There is, in other words, a demand for people who are capable of seeing the forest rather than the trees, of making overall judgments. And these "generalists" are particularly needed for administrative positions, where it is their job to see that other people do the work, where they have to plan for other people, to organize other people's work, to initiate it and appraise it.

Specialists understand one field; their concern is with technique, tools, media. They are "trained" people, and their educational background is technical or professional. Generalists—and especially administrators—deal with people. Their concern is with leadership, with planning, with direction, and with coordination. They are "educated" people, and the humanities are their strongest foundation.

Any organization needs both kinds of people, although different organizations need them in different ratios. It is your job to find out, during your college years, into which of these two job categories you fit, and to plan your career accordingly.

1. What is the purpose of the talk?
2. According to the speaker, which people are likely to be specialists?
3. Based on the information in the talk, indicate whether each characteristic below more accurately describes a specialist or a generalist.
4. According to the speaker, why are generalists needed in administrative positions?
5. What can be inferred from the talk?

Questions 6 through 10. Listen to part of a talk in a botany class.

There are several common leaf arrangements in wildflowers. In the usual arrangement, the one called alternate, each leaf is attached at a different level on the stem. This poppy is a good example. See how … uh … there's a leaf here, on the right side, and above that a leaf on the left here, and above that, one on the right again … and so on, alternating right and left, all the way up the stem.

Another type is the opposite arrangement. Notice the difference between the alternate leaves on the poppy and the opposite leaves on this bee plant. The bee plant's leaves are paired on opposite sides of the stem. See how they're attached at the same level of the stem, but on opposite sides.

And here we have yet another kind. This one's called basal, and our example is the amaryllis. Notice how all the leaves are at ground level, at the stem's base. The amaryllis … this particular plant, and all other members of the amaryllis family … uh … it has narrow basal leaves and a long, leafless stalk.

I have some lovely samples to share with you today. I'd like you all to come up and examine the contents of … uh … these

two tables. Many of them are specimens of the sunflower family, which includes several species with alternate and opposite leaves. Take a good look and see if you can identify the three types of arrangements. It's OK to handle … but let me ask you to please handle with care, as some of them are quite delicate.

6. How does the instructor organize the information that she presents?
7. Select the drawing that best shows the alternate leaf arrangement.
8–9. Based on the information in the talk, indicate whether each sentence below describes the alternate, opposite, or basal leaf arrangement.
10. What will the students probably do next?

04-LISTENING, Track 4

2.6 SUMMARIZING A PROCESS

Focus (p. 272)

Listen to part of a talk in a film class.

The part of filmmaking that most people know about is the production phase—when the film is actually being shot. But a lot of the real work is done before and after the filming. The film's producers are in charge of the whole project. The producer hires a director to make the creative decisions. The producer and the director work together to plan the film. They hire writers to develop a script for the film. Then, from the script comes the storyboard, an important step in the planning. The storyboard is like a picture book, with a small picture for each camera shot. Under each picture, there's a summary of the action and sometimes a bit of dialogue.

Then comes the production, when the filming takes place. During production, the director and crew concentrate on getting the perfect camera shot. The director may ask for several takes of the same shot, sometimes changing the script for each take.

After the filming is done, there's still a lot to do. This is the post–production phase, and includes editing the film. The editor's job is to cut up the various film sequences and then put them together in the right order so the story is told in the best way. The editor works closely with the director, as well as various artists and technicians. This is when the sound and special effects are added—the final result being the finished movie you see in the theater.

The professor explains how a film is made. Summarize the process by putting the steps in the correct order.

04-LISTENING, Track 5

Exercise 2.6.A (p. 275)

Questions 1 through 2. Listen to part of a talk in an art class.

If you are unsure of drawing directly in pen and ink, start off with a light pencil sketch. This will allow you to make sure that your proportions are correct and that you are happy with the composition.

Take a few minutes to study your subject—this chair and violin. Notice how the straight lines of the chair differ from the curves of the violin. Once you are ready to begin drawing, define the shape of the chair with clean straight lines. Then add contrast by drawing the outline of the violin with gently curved lines. You may have to apply more pressure to the nib when drawing curved lines to allow the ink to flow easily.

When you have drawn the outlines of both objects, add in the finer details, such as the seat of the chair and the violin strings. Suggest the texture of the woven seat by using light and dark strokes of the pen.

1. What is the purpose of the talk?
2. The instructor briefly explains how to draw the subject. Indicate whether each sentence below is a step in the process.

Questions 3 through 5. Listen to a geography professor talk about avalanche control.

Avalanches are a constant threat on mountain highways. The Rogers Pass stretch of the Trans–Canada is at risk of being buried in snow from November to April every year. This is why the highway now has a sophisticated defense system. The best way … it's important to control an avalanche when it's small … so a slide is set off while it's still small, before it builds up into a serious danger.

A team of snow technicians monitors the snowpack. They sort of "read" the snow and try to predict when it's likely to slide. They study data from the weather stations in the mountains. As the danger increases, they drop explosives onto test slopes to see if the snow can be made to slide.

It's kind of tricky trying to decide just when the snow will slide. The weight of the snow, together with the force of gravity, is what starts an avalanche. The technicians don't want to wait till it's too late, but if they're too early, before conditions are just right, the snow won't release.

When the time is right, they close the road and remove all traffic from the pass. Most closures last two to four hours. Then the army comes in. A ten–man artillery crew operates a mobile 105 mm howitzer, firing shells into the slopes. This sends out shock waves that trigger the avalanches. Slides are set off, one by one. The technicians direct the action, telling the troops where to aim the gun. Visibility can be awful. Then they have to check and see if the avalanche has released well enough. Sometimes they drive their trucks below the slide path—kind of dangerous work—and they listen to the snow come down. Sometimes, if the slide is bigger than they expected, they might have to make a speedy getaway.

3. According to the professor, why is it important to control an avalanche when it is small?
4. What are the natural causes of an avalanche?
5. The professor explains how a controlled avalanche is achieved. Summarize the process by putting the steps in the correct order.

Questions 6 through 10. Listen to a discussion in an ecology class. The class is talking about the salmon's run.

W1: Various species of Pacific salmon make a round trip from the small streams where they are born, to the sea, and then back to the stream of their origin, where they spawn and die. This round trip is known as the salmon's run. The end of the salmon's run is the beginning of the next generation. Pacific salmon hatch in the headwaters of a stream. As fry, the fish then migrate downstream via rivers, and eventually to the ocean, where they require several years to mature. While in the sea, salmon from many river systems school and feed together. When mature, the salmon

form into groups of common geographic origin and migrate back toward the river they emerged from as juveniles.

M: Is it true that they find their way home by their sense of smell?

W1: During the first stage of their return, they navigate by the position of the sun. But later, when they reach the river leading to their home stream, their keen sense of smell takes over.

M: Just what is it they can smell? The other fish?

W1: The water flowing from each stream carries a unique scent. This scent comes from the types of plants, soil, and other components of that stream. This scent is apparently imprinted in the memory of a salmon fry before it migrates to the sea.

W2: I remember having a real shock when I was hiking once. I was looking at a waterfall, and I saw a salmon jump up, about ten feet! At first, I couldn't believe my eyes. But then I saw another one do it! And then several more! It was an awesome sight.

M: They must have an incredibly powerful instinct.

W1: The survival of their species depends on their ability to get home and reproduce. And, of course, other species depend on the survival of the salmon. Salmon provide an important link in the food chain. They spend 90 percent of their lives in the ocean, where they feed on plankton, shrimp, and small fish. When they make their return journey, they carry nutrients from the ocean back to the rivers and streams.

M: Up north, where I used to live in the river valley, the eagles would gather for the salmon run every year. They'd gorge themselves on all the salmon that had just spawned.

W1: Nothing is wasted in nature. After the salmon spawn, their carcasses feed birds, mammals, and vegetation—and even their own newly hatched offspring.

6. The professor explains what happens during the salmon's run. Indicate whether each sentence below is a step in the process.
7. How do salmon find their way to their home stream?
8. Listen again to part of the discussion. Then answer the question.
   "I remember having a real shock when I was hiking once. I was looking at a waterfall, and I saw a salmon jump up, about ten feet! At first, I couldn't believe my eyes. But then I saw another one do it! And then several more! It was an awesome sight."
   Why does the student say this:
   "At first, I couldn't believe my eyes."
9. According to the professor, why are salmon an important link in the food chain?
10. What can be concluded from this statement:
    "Nothing is wasted in nature. After the salmon spawn, their carcasses feed birds, mammals, and vegetation—and even their own newly hatched offspring."

04-LISTENING, Track 6

Exercise 2.6.B (p. 276)

Questions 1 through 3. Listen to part of a lecture in a botany class. The professor is discussing photosynthesis.

The complex process inside a leaf takes energy from the sun and uses it to convert water and carbon dioxide into sugars. During this process—photosynthesis—plants convert light energy into chemical energy.

All leaves carry out photosynthesis in basically the same way. First, the pores on the leaf's outer skin open up and take in molecules of carbon dioxide. Water absorbed by the roots is transported upward through the plant, and it enters the leaf through its stem. Carbon dioxide and water—these are the raw materials for photosynthesis. Once carbon dioxide and water are present, photosynthesis can begin.

The chemical reactions of photosynthesis take place in two stages: the light-dependent reactions and the light-independent reactions. When sunlight shines on a leaf during the light-dependent stage, its energy is absorbed by molecules of chlorophyll, which you all know is the pigment giving a leaf its green color. The light energy absorbed by the chlorophyll is used to split the hydrogen and oxygen in the water. Then, during the light-independent reactions, hydrogen from the water combines with carbon dioxide … and forms carbohydrates, including the sugar glucose, but also other molecules that are rich in food energy for the plant. In the process, excess oxygen is released to the outside air through the leaf's pores.

Finally, the plant transports the products of photosynthesis. Microscopic veins in the leaf carry the food out through the stem and into the cells of the plant. This process continues all throughout the growing season, that is, as long as the leaves remain green.

1. Which of the following best describes the organization of the lecture?
2. What must be present for photosynthesis to begin?
3. The professor briefly explains what happens during photosynthesis. Indicate whether each sentence below is a step in the process.

Questions 4 through 7. Listen to part of a lecture in a psychology class. The professor is talking about stating laws in the science of psychology.

Psychology is a relatively new science. Like other sciences, psychology must be able to state laws. A law is a way of organizing knowledge about something so that we can make predictions. When enough knowledge is gained about a subject, a scientist can state precisely what will happen under certain conditions.

We experimental psychologists are interested in developing laws about human behavior so we'll be able to understand and predict what people do and why they do it. Of course, to develop laws about human behavior, we must assume there's some regularity to it. We can't be psychologists without making the assumption that behavior follows certain patterns.

One of the major laws psychologists have discovered is called the Law of Effect. The Law of Effect states that whether or not a person will repeat a behavior depends on the effect that behavior has. If an action is rewarded, it's likely to be repeated. If the action is not rewarded, or if it's punished, it's not likely to be repeated.

How do psychologists state laws? First, using available knowledge, a psychologist makes a hypothesis about behavior. Then, the psychologist tests the hypothesis through an experiment. But even if the experiment proves the hypothesis was correct, it's not yet a law. It's just the beginning of the work. To arrive at a law that will apply to all humans, many repetitions of the experiment must be conducted under different conditions. Only repeated verification, especially proof that the behavior can be predicted, will result in a law.

4. According to the professor, why are psychologists interested in developing laws?
5. According to the professor, what assumption do psychologists make?
6. Which behavior illustrates the Law of Effect?
7. The professor explains how psychologists develop laws. Summarize the process by putting the steps in the correct order.

Questions 8 through 10. Listen to part of a lecture in a biology class.

There are lots of different wetlands—from marshes to swamps to bogs. The flow of water through a wetland determines the types of plants that grow there. A marsh is a wetland where the soil is regularly or permanently saturated with water. Because of the continuous presence of water, marshes usually don't contain trees or shrubs. Marsh vegetation is usually soft-stemmed or herbaceous—for example, grasses, sedges, and mosses.

Wetlands are among the richest of all biomes. Animal life is highly diverse and includes an array of insects, amphibians, reptiles, and birds. Because marshes are so biologically productive, an abundance of dead plant and animal material—energy-rich organic matter—enters the food chain each year. And much of this energy-rich biomass is broken down by bacteria and water fungi. The water in marshes may become tea-colored or dark brown because of the organic acids from the decaying vegetation.

In the past, humans have viewed these marshes—and most wetlands—as the source of mosquitoes, bad odors, and disease. Humans have destroyed a lot of wetlands, mostly to make way for agricultural development. Now, however, we recognize the ecological importance of wetlands and we're putting a lot of research into figuring out how wetlands can be restored.

8. According to the professor, which type of vegetation grows in marshes?
9. The professor briefly describes a biological process that occurs in a marsh. Indicate whether each sentence below is a step in the process.
10. Why have so many wetlands been destroyed?

04-LISTENING, Track 7

QUIZ 6 (p. 279)

Questions 1 through 3. Listen to part of a talk in a marine biology class.

An ocean's waters are not the same all the way through. They are divided up like a building with several stories, where life is very different at the top, middle, and bottom stories.

The upper layer of the ocean is warmer than the layers underneath. The clear, sunlit waters near the surface are an ideal place for the microscopic plants called plankton to grow. The tiny plant plankton provides food for tiny animal plankton, and so they start off the food chain for everything else in the sea. Huge schools of fish, like herring and sardines, cruise the upper waters to eat the animal plankton. Big, fast-swimming fish, like tuna and swordfish, swim through the same levels to capture the smaller fish.

About 200 meters below the surface, the temperature suddenly drops. This is a dimly lit twilight world. From there to the ocean's bottom, it is very cold.

Utter darkness usually begins at a depth of 1,000 meters. Down in the bottom zone, no plants can survive, and all that can be found there are animals hunting and feeding on other animals.

1. According to the professor, what characterizes the ocean's upper zone?
2. The professor briefly describes the ocean's food chain. Indicate whether each sentence below is a step in the process.
3. How does the professor describe each layer of the ocean's waters?

Questions 4 through 6. Listen to part of a talk in a zoology class. The professor is talking about bees.

The worker bees, underdeveloped females, do all the work that is done in the hive. They secrete the wax, build the comb, gather pollen, feed and rear the brood, and fight all the battles necessary to defend the colony. The worker bees possess the whole ruling power of the colony and regulate its economy.

The worker develops from the egg into a perfect adult bee in twenty-one days. Each egg is laid by the queen bee, who deposits it in the bottom of the worker cell. After three days, the egg hatches into a small white worm called a larva, which, being fed by the adult bees, increases rapidly in size. When the cell is nearly filled by the growing larva, it is closed up by the bees. The larva then enters the pupa state.

When the adult worker emerges from the pupa, she usually does not leave the hive until about eight days later. Then, accompanied by other young workers, she takes her first flight in the warmth of the afternoon.

The body of the worker bee is divided into three segments—head, thorax, and abdomen. On the head are the mandibles, the jaw-like organs which enable the bees to perform the necessary hive duties and to mold the wax and build their combs. The honey bee's four wings and six legs are fastened to the thorax. Located in the abdomen are the honey sac and the sting, with its highly developed poison sac. The sting is used by the workers for self-defense and for the protection of their colony. The worker uses her sting only once, for in doing so, she loses her life.

4. What tasks does the worker bee perform?
5. The professor describes the stages of a worker bee's development. Summarize the process by putting the events in the correct order.
6. What segment of the bee's body contains the feature necessary for each activity?

Questions 7 through 10. A student is giving an oral report in a world history class. She is talking about bread and cereals.

Bread and cereals have a long history. The first bread was made in the Nile valley about 10,000 years ago. The people used stones to crush the grain into coarse flour, and then they made the flour into primitive forms of bread. Primitive bread was not like the bread we know today because it was simply

flour dough dried on heated stones. The invention of ovens came later.

Leavened breads and cakes, which are made to rise by the action of yeast, were also a discovery of the ancient Egyptians. The Egyptians were the first people to master the art of baking. News of this new wonder food spread to other places in the Middle East. Soon other people were collecting seed, cultivating land, and inventing ways to turn grain into flour.

Baking used to be a social activity. While some homes had their own ovens, many families had to bake their dough in communal bakeries. To identify their loaves, each household would make a distinctive mark on the bread, sometimes with a special stamp bearing the family name.

Modern cereals descended from the cereals grown long ago. These grains now supply the world with everything from bread and breakfast cereal to pasta, and even candy and beer.

The most important grain crop in the temperate regions of the world today is wheat. Bread wheat is the most widely planted variety. The large grains of bread wheat are rich in gluten—a kind of protein—and produce light, airy bread. Another widely cultivated variety of wheat is durum, which goes into making pasta.

Other important cereal crops are rye and oats. Rye is the hardiest cereal and is more resistant to cold, pests, and disease than wheat. Oats are grown in temperate regions and are mainly fed to cattle, but the best quality oats are made into oatmeal and other breakfast foods.

7. What topics does the speaker discuss?
8. The speaker traces the history of bread. Indicate whether each sentence below describes an event in the history.
9. Why did people stamp their bread with the family name?
10. Based on the information in the talk, indicate whether each phrase below describes wheat or oats.

04-LISTENING, Track 8

QUIZ 7 (p. 281)

Questions 1 through 5. Listen to a discussion in a music history class. The class is studying improvisation.

M1: Every jazz player knows what he or she means by improvisation. And all writers know what they mean by improvisation. The result, of course, is a lot of confusion and disagreement about what improvisation really is. We hear about the different types of improvisation: "free" improvisation and "controlled" improvisation and "collective" improvisation. What does it all mean? Yes, Mary?

W: My dictionary says "improvise" means "to compose or recite without preparation."

M1: That's true, but it tells us only part of the story. As we know, musicians learn how to play their instruments before they can improvise. So they do have some preparation. Yes, Arthur?

M2: Maybe a better definition is "composing and performing at the same time."

M1: That tells us another part of the story. Let's try to understand it more by looking at history. Improvisation is as old as music itself. In the beginning, music was largely improvisational, supplied on the spur of the moment by prehistoric people who "made" music for work, play, war, love, worship, and so on. Music was not separate from everyday life. Rather, music was a force that communicated the relationship of people to nature, and people to each other. Two thousand years ago, the practice of improvisation was widespread among the ancient Greeks. The Greeks based their improvisations on what we might call "stock melodies"—a collection of tunes known by all musicians. In sixteenth–century Italy, organists had contests for improvising. The ability to improvise in a fugal style—several melodies going at the same time—was a standard requirement for all appointments to organ positions. So, these "cutting" contests were like job interviews.

M2: Didn't some of the early jazz musicians have those kinds of contests, too?

M1: Actually, the early jazz musicians were very similar to the ancient Greeks in that they were making a music partly their own and partly derived from the "stock melodies" in their environment. In most cases, black musicians improvised on the European melodies they heard white bands playing.

W: Were they really just creating music, without any preparation except hearing other musicians?

M1: I'm glad you asked that, Mary. There were a number of musicians who'd played in army bands, and they had training of one kind or another. It was these trained military bandsmen who were responsible for the rise of jazz improvisation.

1. Why is improvisation difficult to define?
2. How does the professor develop the topic of improvisation?
3. Who first improvised when playing music?
4. Based on the information in the discussion, indicate whether each phrase below describes prehistoric humans or jazz musicians.
5. What does the professor imply about early jazz improvisation?

Questions 6 through 10. A professor of education is giving a lecture about child development. Listen to part of the lecture.

In some ways, mental development is related to social development in school–aged children. Between the ages of six and twelve, children move from being able to think only on a concrete level—that is, about real objects they can touch—to being capable of abstract thought. In their social development, children gradually acquire interpersonal reasoning skills. They learn to understand the feelings of other people, and also learn that a person's actions or words don't always reflect their inner feelings.

When children first start school, at around four to six years old, they can focus on only one thought at a time. Socially, they can understand only their own perspective, and don't yet understand that other people may see the same event differently from the way they see it. They don't reflect on the thoughts of others. What I mean is, children at this age are self–centered, and for this reason it's known as the egocentric stage of social development.

Children six to ten years old solve problems by sort of generalizing from their own experiences. What I mean is, they can understand only what they've experienced for themselves. They can't think theoretically or abstractly. They have to handle real objects in order to solve problems. But socially, children are learning to distinguish between the way they understand social interactions and how other people interpret them.

From ten to twelve years old, children's mental processes are still sort of tied to direct experience. But on a social level,

children can now understand actions as an outsider might see them. This permits children to understand the expectations people have of them in a variety of situations. Children can now manage various social roles—for example, son or daughter, older or younger brother or sister, fifth grader, classmate, friend, teammate, and so on. Because they can play multiple roles, this stage is known as the multiple role–taking stage.

Beginning around age twelve, children can start dealing with abstractions. What I mean is, they can form hypotheses, solve problems systematically, and not have to handle real objects. And the social perspective is also expanding, because in this stage children can now take a more analytical view of their own behavior, as well as the behavior of other people. Sometime between twelve and fifteen years old, a societal perspective begins to develop. I mean, the young teenager is now able to judge actions by how they might influence all individuals, not just the people who are immediately concerned.

6. What is the main idea of the lecture?
7. At what age is a child least able to recognize the thoughts of other people?
8. Listen again to part of the lecture. Then answer the question.
   "Children six to ten years old solve problems by sort of generalizing from their own experiences. What I mean is, they can understand only what they've experienced for themselves. They can't think theoretically or abstractly. They have to handle real objects in order to solve problems."
   Why does the professor say this:
   "They have to handle real objects in order to solve problems."
9. What can be inferred about children in the multiple role–taking stage?
10. The professor briefly explains the stages of social development in children. Indicate whether each sentence below is a stage in the process.

04-LISTENING , Track 9

QUIZ 8 (p. 283)

Questions 1 through 5. Listen to a conversation between a student and a professor.

W: Dr. Zarelli?
M: Hello, Karen. How are you?
W: Pretty good, thanks. I was hoping … um … we could talk about the project that's due at the end of May.
M: Of course. What can I do for you?
W: Well … the project plan … that part's due next week, right?
M: Uh … I believe that's right. Let me look at the syllabus. I tend to forget dates unless I have them right in front of me! Uh … yes, that's right, the first due date—the project plan—is due next week, on Monday, May 3.
W: I'm a little—I'm not sure about what you want. Do you just … uh … what exactly should the plan look like?
M: Well, a description—a summary of your project. A short description of the topic and a summary of your materials and methods and what you hope to accomplish.
W: I have an idea … um … it's something that interests me. But I'm not sure if—I don't know whether it fits the assignment. It's not about marketing as much as—it has more to do with social change.
M: Let's try it on for size. Tell me your idea.
W: Well, my boss—I work part–time at a credit union—and my boss is a person who's done a lot of different things. She used to be the president of an organization that helped set up cooperatives for women artisans in India. They make clothes mostly, and things like tablecloths and toys. She's really interesting—my boss, I mean—and so are the stories about her work. I guess you could say she works for economic development, but also for social change because it's work that affects women and their role in society.
M: Can you tell me more about the organization?
W: Sure. They're called Hearts and Hands. I looked at their Web site. They have a motto, "Changing views, changing lives," and their mission statement is "To empower artisans by providing economic opportunities and exposure to new ideas." My boss was the president for five years, and she's still on their board of directors.
M: Hmm. And what would you like to do with all this?
W: Well, I'd like to interview my boss—a more formal interview—and write about her work with Hearts and Hands.
M: OK, and …?
W: I could do a case study about a group that works for both economic and social change. I could combine the interview data with information from their Web site.
M: It would also be a good idea to link some of your findings with the theories and models we've discussed in class.
W: Oh, like, for example, their product catalog? They have a printed catalog, and it's also online.
M: Great idea! You could include an analysis and evaluation of their catalog. I have to say, Karen, you've got a fairly solid plan here. Your idea of a case study of an economic development organization is a good one, and it fits right in with our course content. All you need to do now is put down your plan on paper.
W: Really? I'm so glad to hear you say that! I'll do it then. I'll write it up for next week. Thank you, Dr. Zarelli. You've been a great help!
M: It's my pleasure. Glad you stopped by.

1. Why does the woman go to see her professor?
2. When is the project plan due?
3. Listen again to part of the conversation. Then answer the question.
   "I'm a little—I'm not sure about what you want. Do you just … uh … what exactly should the plan look like?"
   Select the sentence that best expresses how the woman probably feels.
4. What topics will the woman write about?
5. What information will the woman include in her project?

Questions 6 through 10. Listen to a talk in a geology class. The professor is discussing rock formations.

Now that you know how sedimentary rocks are formed, the next step is to look at various shapes and learn to read them. On our next field trip, we'll see several of the formations called "mesas." This landform gets its name from its flat top. "Mesa" means "table" in Spanish. The Spanish people who explored the area thought these flat-topped hills looked sort of like tables. A mesa is wider than it is high—kind of like a large table.

We'll also see a variety of other formations, such as buttes, spires, and pillars. All of these spectacular forms are the result of the erosion of rocks of differing hardness. Water erodes rocks both mechanically and chemically. The fast-moving water of rivers carries silt, gravel, and rock debris, and this scours the rock underneath. Slow-moving standing water also erodes when it enters tiny rock pores and dissolves the cements holding the rock together.

On a mesa, conditions are optimal for erosion. With enough time, even the durable top of a mesa will decrease in size. The sides of a mesa are often made of shale or softer sandstone. The slope of the sides will increase the water's speed and force as it runs down. Freezing and thawing loosen the surface rock. Debris carried by the running water cuts away the softer surface rock. As the softer base of the mesa recedes, the edge of the top is weakened, and it eventually cracks, splits, and falls.

As a mesa is shrunk in size by water, it may be cut into smaller landforms. If these smaller remnants are at least as high as they are wide, they are called "buttes." The great buttes we'll see were all created by water—rather than wind—erosion.

Further erosion can change a butte into a tower or spire. This is because the shaft of the spire is usually harder than the base on which it stands, and—and like a mesa or butte—it's capped with a rim of even harder rock. The spires you'll see were left standing after the sandstone around them eroded away. You can see why they're also called "chimneys." I mean, they sort of jut up from the sandstone floor.

Further erosion of the softer rock may reduce the spire to some interesting and really weird forms. We'll see some hourglass-shaped rocks, mushroom-shaped rocks, and a sort of strangely eroded pillar. Over time, erosion finally topples these rocks to the ground. They might remain there as boulders, or they might undergo further erosion that completely demolishes them so they disintegrate into pebbles. Finally, these pebbles end up as the sand we walk on as we explore the surface of the plateau.

6. Which picture represents a mesa?
7. What reasons are given for the erosion of a mesa?
8. Listen again to part of the talk. Then answer the question.
   "The spires you'll see were left standing after the sandstone around them eroded away. You can see why they're also called "chimneys." I mean, they sort of jut up from the sandstone floor."
   Why does the professor say this:
   "I mean, they sort of jut up from the sandstone floor."
9. The professor briefly explains how erosion changes landforms. Summarize the process by putting the stages in the correct order.
10. What can be concluded about erosion?

PART 3 – SPEAKING

QUIZ 1 (p. 305)

SPEAKING, Track 1

What is the most interesting class you have ever taken? Explain the aspects of the class that made it interesting. Include details and examples in your explanation.

SPEAKING, Track 2

Some people like to read classic works of literature. Others prefer watching film versions of the same stories. Which do you prefer and why? Include details and examples in your explanation.

QUIZ 2 (p. 306)

SPEAKING, Track 3

Describe a city or town where you have lived. Explain why this place is either a good place or not a good place to live. Include details and examples in your explanation.

SPEAKING, Track 4

Some students take one long examination at the end of a course. Others have several shorter tests throughout the course. Which situation do you think is better for students, and why? Include details and examples in your explanation.

QUIZ 3 (p. 307)

SPEAKING, Track 5

Describe your idea of the perfect job. Explain why this job would be appealing to you. Include details and examples in your explanation.

SPEAKING, Track 6

Some people like taking their vacation in a city. Others prefer spending their vacation in the countryside. Which do you prefer and why? Include details and examples in your explanation.

3.5 INTEGRATED SPEAKING: CONNECTING INFORMATION FROM TWO SOURCES

Do You Know (p. 310)

SPEAKING, Track 7

Now listen to two students as they discuss the campus food service.

W: Have you voted on the food service yet?
M: No, but I intend to. I'm going to vote for the second option.
W: That's the one that closes the main cafeteria, isn't it?
M: Right.

W: But the main cafeteria is in the Student Center. That's where everyone goes at lunchtime. Doesn't it make sense to have food there?
M: But it's always so crowded in there at lunchtime. You have to wait a long time in the food line. And there are never enough places to sit.
W: That's true, but they say they'll add more tables.
M: There aren't enough bike racks outside either. I have no place to put my bike. Most of the time I eat at one of the snack bars. Besides, I like the idea of having several smaller eating places all over campus. That seems a lot more convenient, since we have classes all over campus anyway. It also means less crowding, and you don't have to wait as long to get your food. More food choices, too—I kind of like the idea of barbecue on campus.
W: Yeah, that does sound good, doesn't it?

The man expresses his opinion about the campus food service. State his opinion and explain the reasons he gives for holding that opinion.

Exercise 3.5.A (p. 311)

SPEAKING, Track 8

Now listen to two students as they discuss the course for tutors.

W: Hey, Gavin, you should enroll in this course for tutors.
M: Me? I'm not a tutor.
W: But you want to go to graduate school, right?
M: Right.
W: And in graduate school you'll be a teaching assistant, right?
M: Probably.
W: Then this training course is just what you need. It will give you a head start on learning how to teach. Some of the universities don't give their TAs much training. They just expect you to know how to do it, so this course might be really useful for the future.
M: Maybe. I could at least get a job as a math tutor.
W: And you'd learn how to do it right. You'd learn some practical theories about teaching and learning.
M: True.
W: Anyway, it might give you skills that could be useful later—no matter what kind of work you end up doing.

The woman expresses her opinion about the training course for tutors. State her opinion and explain the reasons she gives for holding that opinion.

Exercise 3.5.B (p. 312)

SPEAKING, Track 9

Now listen to two students as they discuss the proposal.

W: I just heard the college is increasing the phys. ed. requirement to two courses.
M: Well, that's what they want to do, but I don't think it will happen. Everybody I know hates the idea.
W: Why? Phys. ed. is good for us! Most students need to get more exercise. That's why we have a new phys. ed. building.
M: But it's not up to the college to require us to get more exercise. We have a responsibility to make that choice on our own. I don't think there should be any phys. ed. requirement in college—high school, yes, but not college. Our main job in college is to study. We need to exercise our brains, not our bodies. Besides, I already get a lot of exercise. I'm on my neighborhood basketball team and I also go hiking and rock climbing.
W: Well, obviously you don't need physical education, but other people do.

The man expresses his opinion about the physical education requirement. State his opinion and explain the reasons he gives for holding that opinion.

Exercise 3.5.C (p. 313)

SPEAKING, Track 10

Now listen to two students as they discuss the theater course.

M: This course isn't open to students! That means we can't take it. Don't you think that's strange?
W: Well, yeah, kind of … but students have to be enrolled in the Theater Arts program if they want to be in any of the plays. This course is for people who live in town.
M: I don't think that's right. We pay tuition and fees, so we should be able to take any course we want at this school.
W: But this is a chance for other people to work with the theater students. It's a community class.
M: But it's not fair. What if I want to learn about theater, too? I'm a full–time student. I'm not enrolled in the Theater Arts program, but I'd love the chance to work on a play. The instructor is the director of the Theater program. I would enjoy taking this course just for fun. But I can't because I'm a student! It doesn't make sense!
W: Maybe you should go talk to the dean.
M: I think I will. Maybe I can convince him that this rule discriminates against students.

The man expresses his opinion about the theater course. State his opinion and explain the reasons he gives for holding that opinion.

Exercise 3.5.D (p. 314)

SPEAKING, Track 11

Now listen to a student as she speaks to other students who are parents.

My two sons have been enrolled at the campus childcare for a semester now. However, I have to say our experience has been less than satisfactory. For one thing, there really isn't enough space there. There's room for only 20 children at a time, which means a lot of people can't get their children in. My children were on the waiting list for three months before getting in. This is a real problem because it prevents a lot of parents from going to college. The college really needs to find a bigger space so there'll be more room for children, don't you think?

Another thing is, they need to extend the evening hours past nine o'clock because some of the classes don't end until 9:30. So if you have a class that lasts till 9:30, you have to leave early to pick up your children. This isn't fair to the parents who need those night classes because they miss important information in class.

The woman expresses her opinion on the on–campus childcare. State her opinion and explain the reasons she gives for holding that opinion.

3.6 INTEGRATED SPEAKING: TAKING NOTES

Focus (p. 315)

SPEAKING, Track 12

Because a fungus can survive for years in the soil, the best way to control such a disease is to remove and destroy the infected plants, as well as six centimeters of soil around them. Avoid spreading disease by washing off your tools and your shoes when you go from an infected area to a healthy part of your garden. At the end of the gardening season, do a complete cleanup.

Do You Know (p. 317)

SPEAKING, Track 13

Now listen to part of a lecture in a botany class.

Because a fungus can survive for years in the soil, the best way to control such a disease is to remove and destroy the infected plants, as well as six centimeters of soil around them. Avoid spreading disease by washing off your tools and your shoes when you go from an infected area to a healthy part of your garden. At the end of the gardening season, do a complete cleanup.

You can also keep disease away by rotating crops. Crop rotation can be effective in preventing soil–borne disease, especially when the disease is caused by a fungus that likes specific plants. For example, the fungus that causes southern blight is attracted to tomatoes. Once this fungus is present, it will thrive in the soil from year to year, attacking the tomato plants.

With crop rotation, you don't grow the same plant in the same place for at least three consecutive years. So, for example, if you grow tomatoes one year, the next year you shouldn't plant tomatoes in the same place. By planting something else the second and third years, any tomato–loving fungus that survived the winter wouldn't have any tomato plants to feed on. With three years between planting tomatoes, the fungus will die off from lack of a host plant.

Explain ways that a gardener can control plant disease caused by a fungus, and explain why these methods work.

Exercise 3.6.A (p. 318)

SPEAKING, Track 14

Now listen to part of a talk on this topic in a psychology class.

A recent study on emotional intelligence looked at the mental health of young people with high intellectual and artistic abilities. The researcher interviewed gifted students from 12 to 17 years old. He asked them questions like "Do you ever think about your own thinking?" and "If you ask yourself, 'Who am I?', what is the answer?"

So the researcher found all of his subjects to be extremely intense and enthusiastic young people. The subjects experienced emotional highs and lows that caused intense happiness, but also conflict, pain, and a tendency to get overexcited.

For example, one 16–year–old said, "I am a very misunderstood person. People think that my life is easy because I am talented, but I have a lot of problems of my own just because of these talents. I am a very sensitive and emotional person. I get angered or saddened very easily."

What the student said shows us that people with emotional intelligence understand their feelings. However, when young people think deeply about everything and feel everything very strongly, they often experience problems. They're criticized and teased, and they start to believe that something is wrong with them. They feel embarrassed and guilty for being "different" from everyone else.

The professor discusses a study on emotional intelligence. Explain how emotional intelligence affects the experiences of young people like those in the study.

Exercise 3.6.B (p. 319)

SPEAKING, Track 15

Now listen to part of a lecture in a history class.

A name often associated with boycotts is Cesar Chavez. Chavez was a labor union organizer who used nonviolent action to achieve the goals of fair pay and better working conditions for farm workers.

Chavez organized a union of grape pickers in California. When the farm owners who grew table grapes refused to accept the union, Chavez organized a nationwide boycott of grapes. The workers stopped picking grapes, and the grapes began to rot on the vines.

The boycott got a lot of attention. Lots of people from all across the country—public officials, religious leaders, and ordinary citizens—all went to California to march in support of the farm workers. As a result of the boycott, some grape growers signed agreements with the union. So the union ended the boycott, and the workers began to pick grapes again.

Chavez also called for a boycott of lettuce produced by growers without union contracts. People from all parts of the country refused to buy lettuce. Some even protested in front of supermarkets.

The power of boycotts is the negative attention they direct at the people responsible for an offense. In the case of the grape and lettuce boycotts, the growers were the offenders. The boycotts hurt the grape and lettuce growers economically because people stopped buying their products. But even more importantly, the boycotts hurt their reputation.

Explain what happens during a boycott, and explain the causes and effects of the boycotts discussed in the lecture.

Exercise 3.6.C (p. 320)

SPEAKING, Track 16

Now listen to part of a lecture on this topic in a sociology class.

OK … I want to say a couple of things about social roles and role partners. Because relationships exist among various social roles, we can't study one role all by itself. We have to look at a role in relation to its role partners. For example, a man can't be a father without a child, so father and child are role partners.

When there's competition between the expectations of different role partners, we have something called role conflict. For example, as a college student, you've probably noticed that your parents and your friends—both role partners to you—often expect different behavior from you. Your parents want you to stay home and study hard, while your friends say, "you've studied enough, let's go out and party." This is a case of role conflict, and you feel stress of the conflict between your role as a child and your role as a friend.

Mature adults experience the most severe role conflicts. The main conflict is the tension between responsibility to an employer and responsibility to spouse and children. The conflict between work and family roles is especially difficult for women, who feel a great amount of stress because in our society women are still expected to make their family role primary.

Explain the concept of role conflict, and explain when and why a person experiences role conflict.

Exercise 3.6.D (p. 321)

SPEAKING, Track 17

Now listen to part of a lecture on this topic in a zoology class.

A few species of birds will store food in hiding places for later use. For example, nutcrackers bury food and are able to remember the locations of the hiding places with great accuracy. They use landscape features—like distinctive rocks, logs, and other landmarks—as spatial cues to where the food is buried. Spatial memory allows the birds to return and dig up most of the food. Even when an object such as a log or rock has been moved, the birds appear to search in a particular spatial relationship to the object.

Experiments show that animals in familiar landscapes are very skilled at finding and investigating new objects. For example, a group of fourteen baboons were put into their outdoor pen after a new object had been placed there each day when they were absent. The baboons generally took less than three minutes to find the new object. The new objects included both artificial things, like drinking cups and balls, and natural things, like coconut shells and branches. The baboons clearly reacted differently to the new objects. For example, they were much more likely to touch and handle today's new object. But they quickly paid little attention to yesterday's new object. Similar experiments with other animals show that moving familiar objects will cause animals to examine the objects; otherwise, the animals will ignore them.

Explain how the skill of spatial memory influences the behavior of specific animals.

3.7 INTEGRATED SPEAKING: DEVELOPING A TOPIC

Focus (p. 323)

SPEAKING, Track 18

You can also keep disease away by rotating crops. Crop rotation can be effective in preventing soil–borne disease, especially when the disease is caused by a fungus that likes specific plants. For example, the fungus that causes southern blight is attracted to tomatoes. Once this fungus is present, it will thrive in the soil from year to year, attacking the tomato plants.

With crop rotation, you don't grow the same plant in the same place for at least three consecutive years. So, for example, if you grow tomatoes one year, the next year you shouldn't plant tomatoes in the same place. By planting something else the second and third years, any tomato–loving fungus that survived the winter wouldn't have any tomato plants to feed on. With three years between planting tomatoes, the fungus will die off from lack of a host plant.

Exercise 3.7.A (p. 326)

SPEAKING, Track 19

Now listen to a student as she discusses campus housing with an adviser in the Housing Office.

W: Next semester, I'd like to move on–campus. My best friend from high school will also start school here, and the two of us want to share a room in a dormitory.
M: OK … but are you sure you want to room with your friend from high school?
W: Of course. We were best friends last year.
M: You know, this might sound strange, but generally we don't recommend that you share a room with your best friend.
W: Really?
M: It could work out, but a lot of times it can destroy a friendship. The reason is that knowing someone—even being best friends—isn't the same as living together. A better idea might be to live on the same floor as your friend—in the same "neighborhood," so to speak—but have someone else for a roommate. This way, you'll preserve your friendship and also get to know new and interesting people.
W: That does sort of make sense.
M: Or you could live in a dorm with others of your academic major. You'll meet people with similar

interests and develop relationships that can benefit you later, in your professional life.

W: I need to think about this. Thanks for your advice.

The man expresses his opinion about the woman's desire to live on–campus. State his opinion and explain the reasons he gives for holding that opinion.

Exercise 3.7.B (p. 327)

SPEAKING, Track 20

Now listen to part of a lecture in a psychology class.

There's growing evidence that several types of depression are linked to biological and environmental factors. For example, one mild form of depression is linked to the changes in the amount of daylight.

People with seasonal affective disorder—or SAD—have repeated bouts of depression during a particular time of the year, usually fall or winter, when the periods of daylight are shorter. Research suggests that the disorder is related to the body's biological clock and to changes in body temperature and hormone levels. So, when your body doesn't get enough sunshine, the result is symptoms that are similar to those of a major depression but usually not as serious. Usually, you have no energy and just want to sleep more, or you eat more carbohydrates and gain weight. The symptoms usually disappear when the days start getting longer in the spring. So, just as in most other types of mild depression, the symptoms go away when the underlying problem goes away in the spring.

However, some people with the disorder can't wait for spring. So they get relief from a treatment that involves exposure to light from a special fluorescent tube for a certain number of hours each day. Since they can't get real sunlight, they spend a few hours in a room with this special light that fools the body into thinking it's getting sunlight.

Describe the form of depression discussed in the lecture, explaining its causes, symptoms, and treatment.

Exercise 3.7.C (p. 328)

SPEAKING, Track 21

Now listen to two students as they discuss seminars.

W: I just transferred here from another college, and we didn't have seminars there. I don't think I'll like seminars.

M: How do you know you won't like seminars, if you've never had one before?

W: Well, the program seminar reminds me of the class discussions we had in high school. I didn't like those discussions because two or three students always did all the talking. Everyone else in the class had to listen to what the big talkers had to say. There was never a chance for the shy or quiet people to speak up and say what they were thinking. So, most of the discussions were pretty boring.

M: But the seminars at this school aren't like that. Sometimes one or two students lead the discussion, but usually everyone participates.

W: I'd rather listen to what the professor has to say. After all, it's the professor who has the knowledge. It's the professor who's supposed to teach us, not the students.

M: I think you'll change your mind about seminars after you see what they're really like.

The woman expresses her opinion about seminars. State her opinion and explain the reasons she gives for holding that opinion.

Exercise 3.7.D (p. 329)

SPEAKING, Track 22

Now listen to part of a lecture in an art history class.

One of the leading artists of abstract expressionism was a painter by the name of Jackson Pollock. Like other artists of the movement, Pollock tried to express his feelings through painting. He developed an abstract style of painting where he vigorously "dripped" complicated patterns onto enormous canvases. His devotion to the act of painting led to the term "action painting."

Pollock was influential not just for his art but for the process of making it. He painted his huge canvases on the floor so he could work around and over the canvas. He felt more at ease on the floor. He could walk around the painting, work from all four sides, and literally be in the painting. He sort of danced around the borders of the canvas. He spattered the canvas with sprays and drips of paint.

Pollock gave the drip a special character. His technique was to hold the brush or stick a foot above the canvas, and then to throw lines of paint in the air so the paint would fall on the canvas. He controlled this gesture skillfully, and thus, the painting grew from his control of the drip.

A lot of Pollock's paintings were called "all–over" paintings because the paint fills the entire canvas. In these paintings, the canvas is filled with a series of lines, curves, and loops—twisting forms of color that suggest movement—an effect entirely given by the skillful gestures of the artist's brush.

The professor describes the painting style of Jackson Pollock. Explain how Pollock's style made him a leading artist of the movement called abstract expressionism.

3.8 INTEGRATED SPEAKING: SUMMARIZING A PROBLEM AND SOLUTIONS

Focus (p. 331)

SPEAKING, Track 23

W: Say, Lenny, do you know anyone who wants a cat?

M: A cat? No. Why?

W: Well, this poor little cat showed up outside my apartment one day. He was hungry and cold, so I gave him some cheese, and now he's still hanging around. My landlord found out and said I have to get rid of it because pets aren't allowed.

M: You shouldn't be feeding it. If you stop giving it food, it will go away.

W: I know, I know, but he's so hungry. I like the cat, and I want him to have a good home. Actually, I'd like to keep him myself.

M: Well, if that's the case, then you'd better look for another apartment—one that allows pets.
W: I hate to do that. My apartment is so close to campus.
M: Why don't you give the cat to your mother? She likes animals.
W: My mother already has two cats, so I don't know…
M: Well, you'd better do something fast, or your landlord will throw you out.

Do You Know (p. 333)

SPEAKING, Track 24

Listen to a conversation between two students.

W: Say, Lenny, do you know anyone who wants a cat?
M: A cat? No. Why?
W: Well, this poor little cat showed up outside my apartment one day. He was hungry and cold, so I gave him some cheese, and now he's still hanging around. My landlord found out and said I have to get rid of it because pets aren't allowed.
M: You shouldn't be feeding it. If you stop giving it food, it will go away.
W: I know, I know, but he's so hungry. I like the cat, and I want him to have a good home. Actually, I'd like to keep him myself.
M: Well, if that's the case, then you'd better look for another apartment—one that allows pets.
W: I hate to do that. My apartment is so close to campus.
M: Why don't you give the cat to your mother? She likes animals.
W: My mother already has two cats, so I don't know…
M: Well, you'd better do something fast, or your landlord will throw you out.

Describe the woman's problem and the suggestions the man makes about how to solve it. What do you think the woman should do, and why?

Exercise 3.8A (p. 334)

SPEAKING, Track 25

Number 1. Listen to a conversation between two students.

W: Is something wrong with your arm?
M: Oh, not really, it's just that my elbow is bothering me.
W: What happened to it?
M: It's been a little sore lately. I think I lift too many heavy boxes at my job.
W: Well, you'd better go to the clinic and have someone look at your elbow. Are you free right now?
M: Yes, for a little while.
W: Well, come on then. I'll walk over there with you. I'm already heading that way.
M: I can't go to the clinic right now. I have baseball practice at three o'clock.
W: Baseball practice! You shouldn't play baseball if your elbow hurts.
M: I know, but I can't afford to miss any more practice. I've missed a lot already, and my coach will be angry.
W: You need to tell your coach about your elbow. And ask your boss for something else to do besides lifting heavy things.
M: There isn't anything else to do at my job.
W: Well, then you'd better look for a different job. You could really hurt yourself if you're not careful.
M: I know, I know.

Describe the man's problem and the suggestions the woman makes about what he should do. What do you think the man should do, and why?

SPEAKING, Track 26

Number 2. Listen to part of a conversation between a student and her academic adviser.

W: I need help with my registration for Winter Quarter.
M: OK. What can I do for you?
W: I still need to take another course in social science, but it doesn't look like anything will fit into my schedule.
M: Hmm. I see what you mean. You've already got a full schedule. Why don't you wait until Spring Quarter to fulfill the social science requirement?
W: Because I'll be doing an internship in the spring that will be full–time.
M: Hmm. Well … you could take an evening course. There are lots of evening classes in the social sciences, in both Winter and Spring Quarters.
W: An evening course … ugh … I don't like going to class at night.
M: Well, with your schedule, this may be your only choice. Another possibility, of course, is to wait until summer, and fulfill the social science requirement then. Will you be around this summer?
W: I hope to graduate, and then go home for the summer. So this is kind of a problem for me.

Describe the woman's problem and the suggestions her adviser makes about how to solve it. What do you think the woman should do, and why?

SPEAKING, Track 27

Number 3. Listen to a conversation between two students.

W: How are your classes going?
M: All right mostly, that is, except for environmental science. The class is fine, but my learning partner—the guy I'm supposed to do my project with—well, to be honest, he's lazy. I've done all the work so far, but we're being graded together.
W: That's not good. You need to have a serious talk with your partner. You can't let him ruin your grade. You need to lay out a plan for who does what and when. He has to take responsibility for his part of the project.
M: That's for sure. He's hard to get a hold of, too. I've left several messages on his answering machine.
W: You'd better let your professor know about this. Maybe he'll let you do the project with someone else.
M: It's kind of late for that. Besides, I've already started working on it, and so has everyone else.
W: You never know. Maybe you could sort of look around for another group to join. But I would see what your professor says first.

Describe the man's problem and the suggestions the woman makes about how he should deal with it. What do you think the man should do, and why?

SPEAKING, Track 28

Number 4. Listen to a conversation between two students.

M: Hi, Nicole. How's it going?
W: My classes are going well. I wish I could say the same for my car.
M: What's wrong with your car?
W: I'm not sure, exactly. It just won't start up sometimes. It gave me a lot of trouble this morning. It took me ten minutes to get it running, and then I was late for class. I need to have it checked out, but my regular mechanic is expensive, and I still have to pay my tuition.
M: You could take your car to the community college. They have a program in automotive technology, and they fix students' cars for less than a regular mechanic would charge.
W: But I'm not a student at the community college.
M: Check it out anyway. Maybe you don't have to be a student at that school. Just tell them you're a student.
W: Well, maybe.
M: Another place you could try is the bulletin board in the Student Center. People sometimes advertise services like this. Maybe you can find a mechanic that's not too expensive.
W: Hmm. Maybe. Thanks for the tips.
M: No problem. Good luck.

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

SPEAKING, Track 29

Number 5. Listen to a conversation between a student and a professor.

M: Professor Fisher, I'm not going to be in class on Monday, so I'll miss the test. I was wondering if I could make it up later.
W: Well, you know my policy is not to give make-up tests. If you miss one test, then you can try to earn extra points on the other tests. But … haven't you already missed a test?
M: Um … yeah, I missed one a few weeks ago.
W: Then try not to miss this test, and try to do well on it too. Your test scores so far have not been strong. You could be in danger of not receiving credit for the course.
M: Do you mean I might fail?
W: At this point, you need to do something to raise your grade. Why don't you get a tutor to help you, or get a classmate to be your study partner?
M: Well, I guess I could. But, to tell the truth, I don't have the extra time for a tutor or a study partner.
W: Then, in that case, you need to think about whether or not you should stay enrolled in this course. If you're too busy to study and come to class, you should consider dropping it.

Describe the man's situation and the suggestions his professor makes about what he should do. What do you think the man should do, and why?

3.9 INTEGRATED SPEAKING: SUMMARIZING IMPORTANT IDEAS

Do You Know (p. 342)

SPEAKING, Track 30

Listen to part of a lecture in a world history class. The professor is talking about mass migrations of people.

In the nineteenth century, there were several periods when large numbers of people moved from one place to another around the world. In many cases, people moved to another continent. These mass migrations were on a much larger scale than any previous migrations in history. One major movement was from Europe to the Americas, Australia, and Africa. This migration of Europeans involved around 60 million people over one hundred years. Another mass migration was from Russia to Siberia and Central Asia. Another was from China, India, and Japan to Southeast Asia.

These large movements of people were made possible by the new cheap and fast means of transportation, specifically railroads and steamships. Another important factor was the rapid growth in banking and capital, by which large investors financed a lot of the settlement. In some places, immigrants were given free land and other benefits if they settled there. This is what encouraged a lot of people—both immigrant and native-born—to move westward in the United States and Canada. Thus, most regions of the U.S. and Canada were populated by the end of the nineteenth century.

The majority of the people in these mass migrations came from the lower social and economic classes of society. The immigrants were motivated mainly by the hope of a better life for themselves and their children. Since most of the immigrants were unskilled workers, their main contribution to their new countries was the labor they supplied. It was the hard work and high hopes of the immigrants that contributed to the economic growth of their new countries.

Using points and examples from the lecture, describe the mass migrations of people in the nineteenth century, and explain why these migrations occurred.

Exercise 3.9.A (p. 343)

SPEAKING, Track 31

Number 1. Listen to part of a talk in a hotel management class.

Hotel managers are responsible for the overall operation of their establishment. They see that guests receive good service so they will come back to that hotel. Managers are also in charge of finances and see that the hotel earns a profit without sacrificing service.

The top executive in a hotel is the general manager. In a small hotel the general manager may also be the owner. In large establishments with many facilities, the general manager directs the work of department managers such as executive housekeepers, personnel managers, and food and beverage managers. General managers need to be skilled in areas of leadership and financial decision making. They must be able to judge when to make budget cuts and when to spend money for advertising or remodeling in order to earn profits in the future.

Another type of manager is the controller. Hotel controllers usually work in large hotels, where they are responsible for the

management of money. They manage the accounting and payroll departments and find ways to improve efficiency. The controller is an expert at interpreting financial statements, so the general manager and other top managers in the hotel consult with the controller on all financial matters.

Large hotels rely heavily on advertising and public relations to sell their services. Such hotels have sales managers to market the services of the hotel. Sales managers have constant contact with customers and know what selling points appeal to the public. Sales managers need courses in business, marketing, and advertising in addition to hotel management.

Using points and examples from the talk, describe the duties of different types of managers in large hotels.

SPEAKING, Track 32

Number 2. Listen to part of a lecture in a meteorology class. The professor is discussing climate.

Several features on the earth's surface influence climate. Two of these features are ocean currents and landforms.

Ocean currents are formed when the earth's rotation and prevailing winds work together. The prevailing winds push the ocean waters westward in the Atlantic, Pacific, and Indian oceans until these waters bounce off the nearest continent. This causes two large, circular ocean currents, one in each hemisphere. The current in the Northern Hemisphere turns clockwise, and the one in the Southern Hemisphere turns counterclockwise. These currents move warm water from the equator to the north and south.

Warm and cold currents in the world's oceans affect the climates of nearby coastal areas. For example, the warm Gulf Stream in the Atlantic Ocean warms the coast of northwestern Europe. Without the Gulf Stream, the climate of northwestern Europe would be more like that of the cold sub–Arctic.

Landforms such as mountains also affect climate. Because of their higher elevation, mountains tend to be cooler, windier, and wetter than valleys. For example, even though Mount Kilimanjaro, Africa's highest peak, stands near the equator, its summit is always covered with snow. Another thing mountains do is interrupt the flow of winds and storms. When moist winds blow from the ocean toward land, then hit a mountain range, the moist air becomes cooler as it's forced to rise. This causes the air to lose its moisture as rain and snow on mountain slopes that face the wind. The air on the other side of the mountain will be warmer and drier.

Using points and examples from the lecture, explain how two features of the earth's surface influence climate.

SPEAKING, Track 33

Number 3. Listen to part of a talk in a cultural history class. The professor is discussing traditional beliefs about trees.

Throughout the world, there is an extensive mythology about trees. For example, the concept of a great cosmic tree—a Tree of the World—appears in numerous traditions. We find the Tree of the World in Norse mythology. The Norse people, the ancestors of present–day Scandinavians, honored the ash tree as the cosmic tree because it was much larger in size than all other trees in northern Europe. In southeastern Canada, the Algonquin people also believed the ash was the cosmic tree. According to their tradition, the world's first human beings came from the ash tree.

The Europeans who settled in North America also had special beliefs about trees. One belief is that by carrying the seeds of the buckeye tree in their pockets, people would avoid getting a disease of the bones. Another tradition is the water dowser—a person who is said to have the ability to find water underground by using a branch from the hazel tree. I have a personal story about water dowsers because my uncle used one for digging a well on his land. My uncle hired this old man—a dowser—to help him locate the best spot to put the well, and the guy used a hazel branch to do it! He walked back and forth across the property until the branch signaled where the water was. So, you can see that some people still hold this tradition.

So why have trees been so respected in world mythology? For one thing, people have always depended on trees for many of life's necessities: food, oils, building materials, medicines, spices, and dyes. So it's really no wonder that trees are thought of as special … and why there are so many traditions about trees.

Using points and examples from the talk, describe traditional beliefs about trees, and explain why people have thought of trees as special.

SPEAKING, Track 34

Number 4. Listen to part of a talk in a biology class. The professor is discussing animal life in water and on land.

Animal life began in water. When some animals moved from water to land, it was a dramatic event in animal evolution because land is an environment that is very different from water. There were several important physical differences that animals had to adapt to.

The first difference between water and land is the oxygen content. Oxygen is at least 20 times more abundant in air than in water, and it spreads much more quickly through air than through water. Consequently, land animals can get oxygen much more easily than water animals can—that is, once land animals evolved the appropriate organs, such as lungs.

A second difference is in the density of water and air. Air is much less dense than water, and because of this, air provides less support against gravity than water does. This means that land animals had to develop strong legs to support themselves. They also needed a stronger skeleton with better structural support—a skeleton and bones designed for standing and moving in air rather than in water.

And a third difference between life in water and on land is, on land, the temperature of the air changes more easily than it does in water. This means that land environments experience severe and sometimes unpredictable cycles of freezing, thawing, drying, and flooding. Therefore, land animals need to protect themselves from temperature extremes. Land animals had to develop behavioral and physiological strategies to survive in warm and cold temperatures. And one important strategy is being able to maintain a constant body temperature—a physiological strategy that birds and mammals possess.

Using points and details from the talk, describe the physical differences that animals had to adapt to when they moved from water to land.

SPEAKING, Track 35

Number 5. Listen to part of a lecture in an architecture class.

In the late nineteenth century, New York's early "skyscrapers" were steel-framed stone buildings that were only eight or nine stories tall. Then, in 1902, the city got its first true skyscraper. It was called the Flatiron Building, and it was the first structure to come close to being the ideal skyscraper—that is, an office tower that stood apart, forever free on all sides.

The Flatiron Building is twenty-two stories tall. It has a steel frame that's covered on the outside with stone. The first three stories give a sense of heaviness to the lower part of the building. The next thirteen stories have windows grouped in pairs, with carved geometric patterns between them. The top stories are even more decorated with columns and arches, and the top is a heavy crown of carved stone.

The Flatiron Building is different from most other skyscrapers because of the shape of the site it's built on. The irregular, triangle-shaped site was the result of three streets coming together. Because the site is surrounded by streets, the Flatiron Building will always stand alone, separate from other buildings on all three sides.

The building's name—actually its nickname—was a joke about its flatiron shape. At that time, electric irons hadn't been invented, so clothing was pressed with a flatiron, a heavy triangle-shaped piece of iron that was heated on top of a stove. People joked that the building looked like a flatiron, and the name stuck.

Because the Flatiron Building was so narrow, a famous photographer said it looked like the front end of a huge steamship. We can honestly say that this bold design, this strange, tall, thin building, changed the design of the office building forever.

Using points and details from the lecture, describe the Flatiron Building and explain how it got its name.

3.10 EVALUATING INTEGRATED SPEAKING

Exercise 3.10.A (p. 350)

SPEAKING, Track 36

Now listen to part of a talk in a sociology class.

Agents of socialization are the people and institutions that teach you about the culture you live in, including its rules. The first agents of socialization are your parents or other adults who take care of you when you're a baby. Your parents give you the first important lessons in how to behave in society.

When you're a teenager, your peers—your friends and classmates—are important agents of socialization. Your peers support you and help you grow up and out of your family's nest. Your parents and peers are important in different ways. Your parents give you guidance on long-term goals, like career choice, but your peers are more likely to influence your immediate lifestyle choices, like how you dress and what you do for fun.

And since you spend so many years in school under the guidance of teachers, teachers are also agents of socialization. Teachers give you knowledge and also serve as models for responsible adulthood. Institutions—like clubs and religious organizations—are also agents of socialization. So are the mass media—television, magazines, popular music, and the Internet.

Define agents of socialization, and explain how specific agents of socialization influence an individual.

Exercise 3.10.B (p. 351)

SPEAKING, Track 37

Listen to part of a conversation between two students.

M: How do you like living in the campus apartments?
W: Well … it's OK. I mean, I like the apartment, but my roommate is kind of a problem. Sometimes she uses my things without asking—mostly little things, like paper and toothpaste, but once it was my favorite sweater. And she never cleans the bathroom when it's her turn.
M: Have you sat down with her and had a good talk about these things?
W: Maybe if I saw her more often. The problem is, she's hardly ever home.
M: Try leaving her a note.
W: I did, but it didn't help.
M: Isn't there an apartment manager, someone who will help you sort out problems like this? I don't know … like set up a meeting with your roommate?
W: I didn't know the manager does that kind of thing. I guess I could find out.
M: And if that doesn't work … if talking it over doesn't help, then you should probably just move out, find another place. There's always someone looking for a roommate.

Describe the woman's problem with her roommate and the suggestions the man makes about how she could deal with it. What do you think the woman should do, and why?

QUIZ 4 (p. 353)

SPEAKING, Track 38

Now listen to two students as they discuss the career workshop.

M: Are you going to the career workshop on Saturday?
W: Um. I don't know. I don't think so. I have a lot of studying to do this weekend.
M: You should go. It's supposed to be really good.
W: Oh, yeah? How?
M: My professor recommended it. He owns a small business downtown, and he'll be there. He says that talking to the business people who'll be there is one of the best ways to find out what's happening.
W: But my major isn't business; it's nursing.
M: Oh. But you should go anyway. There'll be a lot of people to talk to, people in health services. You should talk to people working in the field to find out more about what it's like. Some of them are graduates of this university.
W: But I have a test on Monday. I really need to study all day.
M: Study on Sunday instead. This is more important. The university has only one of these workshops each year. You shouldn't miss it. It's a good way to start looking for a job after graduation.
W: Hmm. Maybe you're right.

The man expresses his opinion about the career workshop. State his opinion and explain the reasons he gives for holding that opinion.

SPEAKING, Track 39

Now listen to part of a lecture in a psychology class.

We have new evidence that sleep improves our ability to learn language. Researchers have found that sleep improves the ability of students to retain knowledge about computer speech—even when the students forget part of what they've learned.

The researchers tested college students' understanding of a series of common words produced by a computer that made the words difficult to understand. They first measured the students' ability to recognize the words. After that, they trained the students to recognize the words and then tested them again to measure the effectiveness of the training.

One group of students was trained in the morning and tested twelve hours later, at night. During that 12–hour period, the students had lost much of their learning. The students were then allowed a night's sleep, and were retested the next morning. When they were tested again in the morning, their scores had improved significantly from the night before.

The researchers were amazed by the loss of learning the students experienced during the day and then recovered after sleeping. The students forgot what they learned during the day because they listened to other speech or thought about other things. The results of the study are fairly clear: a good night's sleep is good for learning. Even if information is forgotten, sleep helps restore a memory.

The professor describes a study about the effects of sleep. Explain how the study supports the connections between sleep and learning.

SPEAKING, Track 40

Now listen to a conversation between two students.

W: This weekend is going to be crazy! I have two midterm exams on Monday, and I should study all weekend, but my parents are coming to visit. They'll want to spend time with me and want me show them around town. I look forward to seeing them, but I don't know when I'll have time to study for my exams!

M: Why don't you join our biology group tonight? There are three of us so far. We're reviewing for the midterm, starting at six o'clock.

W: Tonight? Uh … I'd have to get the night off from work.

M: Well, if you can make it, then please come. We meet at Mark's house at six o'clock.

W: Uh … OK, but I'll have to talk to my boss.

M: Another thing you could do is just explain to your parents that you have to study for examinations. I'm sure they'll understand. You don't have to spend the entire weekend with them. Just give them a list of places to go during the afternoon and then spend the evening with them.

W: Hmm. I could at least try that. I've got to do something to get ready for exams.

The students discuss possible solutions to the woman's problem. Describe the problem. Then state which of the solutions you prefer and explain why.

SPEAKING, Track 41

Now listen to part of a talk in a communications class.

Communicating with other human beings relies heavily on what is called body language—all the nonverbal signals that people send to each other. Humans have more than one hundred separate gestures and facial expressions. This makes us the biggest communicators in the animal world, even without our spoken language.

Body language communicates a great deal about how people perceive a social situation. When strangers first meet in a social situation, such as a meeting or a party, they often will lift their eyebrows to communicate friendly feelings. Also, they may make some hand or arm gesture, such as a salute or a handshake, to signal involvement.

The human face is extremely expressive. Eye movement, for example, has an important role in regulating the rhythm of conversation. In Western society, eye contact is usually held between people about one third of the time they are talking together. The closer and more friendly they are, the more often they look at each other. Often a speaker will signal his intention to speak by looking away from the other person and then continuing to look away while speaking. The listener signals his interest and attention by looking at the speaker and nodding his head slightly.

Most important is the smile, the very human gesture that recognizes the other person as a fellow social being. Even though a lot of body language varies in meaning across cultures, the meaning of the smile is the same in every culture. The smile has a tremendous power to generate friendly feelings. The smile is first seen in human babies as early as four or five weeks old, and a baby can be made to smile by any smiling human face, or even by any stimulus that resembles a face, such as a simple drawing.

Using points and examples from the talk, describe the uses of gestures and facial expressions in human communication.

QUIZ 5 (p. 356)

SPEAKING, Track 42

Now listen to a student and a professor as they discuss the writing course.

M: Professor Olson, I'll be in your writing course next session, and I … uh … I was wondering if I could skip the peer feedback group and just come to the lecture and writing workshop.

W: Oh?

M: It's like this … I … uh … you see, I was in a student writing group before, but it didn't help at all with my writing. The other students were not good writers, so it was a waste of time. I can't learn from other students if they don't know how to write.

W: Learning how to write with other students, responding to the writing of others, expressing yourself in a small group—these are important steps in the learning process.

M: But I can learn better from a teacher because a teacher has more education and experience. The other students don't know how to teach writing. Isn't that the teacher's job?

W: I promise that you'll learn from the teacher, but you'll also learn more than you think from your peers.

The man expresses his opinion about the peer feedback group. State his opinion and explain the reasons he gives for holding that opinion.

SPEAKING, Track 43

Now listen to part of a talk on this topic in a sociology class.

The concept of cohort helps us understand the similarities and differences in the lives of adults of different ages. If we look at times of major social change—like the Great Depression of the 1930s—we can see how variations in experience affected successive cohorts. Everyone who was alive during that period was affected in some way, but because events hit each cohort at a different age, the effects are different for each cohort.

The timing of events interacts with developmental issues, and this produces unique patterns of influence for each cohort. For example, one study showed that people who were teenagers during the Great Depression showed fewer long-term effects than people who were younger children at the time. The younger cohort spent a greater portion of their childhood under conditions of economic hardship, and that affected their family life and their educational opportunities. The negative effects of the Depression on the children's personalities could still be seen in adulthood.

In contrast, people who were teenagers during the Depression didn't show negative effects later in life. In fact, some of them showed more independence and initiative. Thus, you can see how two cohorts that were close in age experienced the same circumstances differently because they were different ages at the time.

Describe the effect of historical events on different cohorts, and explain how the Great Depression influenced two cohorts that were close in age.

SPEAKING, Track 44

Now listen to a conversation between a student and a college administrator.

W: How much does it cost for a permit to park my car on campus?
M: A parking permit is $45 for the quarter. But I'm required to tell you that a parking permit does not guarantee a parking space on campus.
W: What? It takes me an hour to drive here, and I have to park my car somewhere.
M: We know it's a problem. Our parking lots just aren't big enough for all the students we have this year. That's why I'm required to warn you about the situation.
W: What am I supposed to do? I have to drive to school.
M: One thing you can do, if possible, is register for classes that meet in the afternoon. The parking lots are usually full in the morning, but less full in the afternoon.
W: OK.
M: Another thing you can do is park in our park-and-ride lot on Western Avenue, a mile from here. Your parking permit is good there, and you can usually find a parking space. You catch a free shuttle bus to campus from there. They run every 20 minutes.
W: OK, thanks. I appreciate your advice.

Describe the woman's problem and the two suggestions the man makes about how to deal with it. What do you think the woman should do, and why?

SPEAKING, Track 45

Now listen to part of a talk given by the president of a company to students in a business class. The speaker is discussing organizational charts.

No matter what size a business is, its organizational chart tells who is in charge of what, and who reports to whom. Organizational charts facilitate the free flow of information so people can communicate with one another in an orderly way.

The formal structure of many companies is designed in the shape of a pyramid. In the pyramid scheme, the labor force on the bottom supports the whole structure. In the middle are the various layers of management, one on top of the other, on up to the top. The pyramid structure defines the chain of command. Information flows up the chain, and orders flow down. Everyone knows his or her place in the hierarchy.

Although the pyramid is logical, this system never satisfied me. Decision-making can take a long time. Everything must work its way up and down the chain of command. I've seen companies with this structure stagnate when the managers become as rigid as the management structure. But without a formal structure and chain of command, there would be chaos.

In my company, the organizational chart looks more like a wheel than a pyramid. Management is the hub, and all the departments are the spokes giving the wheel its shape. The labor force is the rim. Information flows up through the spokes to the hub.

My company has a policy of open communication throughout the organization. This means that any staff member can go anywhere in the company to ask questions and get answers. I believe that anyone with an idea for improving the company's performance should be able to send it up to my office. I do insist, however, that every report be signed by the person who wrote it. This is so I can contact that person directly if I have questions.

Using points and examples from the talk, describe two types of organizational charts, and explain what they reveal about an organization.

QUIZ 6 (p. 359)

SPEAKING, Track 46

Now listen to two students as they discuss the request for volunteers.

W: What do you think? Are you going to volunteer for the conference?
M: Oh, I don't know. It's difficult for me to plan that far ahead. It's over a month away.
W: I know, but this conference is going to be great. There'll be a lot of prominent speakers from this country and all over the world, including a couple of scientists who won the Nobel Prize.
M: Really?
W: Yeah, and if we work for just two hours, we get to go to the reception and meet lots of experts on global warming. It's a great opportunity—kind of exciting for our school, isn't it? I mean, this conference is a

really big event for us, and volunteering is a way to be a part of it.
M: That's true. But you have to work! Isn't it better to just attend the conference?
W: Ah, but this is one way to learn how a conference is organized. I'm really interested in knowing how to do this sort of thing since I plan to be involved in environmental issues.
M: And you want the free T–shirt.
W: Right!

The woman expresses her opinion about volunteering for the conference. State her opinion and explain the reasons she gives for holding that opinion.

SPEAKING, Track 47

Now listen to part of a talk on the same topic in a film history class.

There were lots of variations on the chase film. One of the most popular chase films was a comedy called Personal. This movie told the story of a wealthy man who advertises for a wife in a personal ad. He announces that he'll meet any potential wives at a famous landmark, but when he goes there, he ends up being chased by a crowd of eager women. This variation was such a hit that other filmmakers quickly copied it.

Another variation was the slapstick police chase made famous by the Keystone Kops. The Keystone Kops were the kings of early silent comedy. The seven clownish Kops created confusion and silliness as they chased villains and bank robbers. The actors performed all their own stunts. And a lot of these stunts involved moving cars, tall buildings, and of course, somebody getting a cream pie in the face.

The chase film was not only popular but also important in the history of film. Making chase films was a valuable exercise in film style. The movement of the chase provided its own visual excitement and led to certain filmmaking conventions. For example, it was common to have the person being chased and the people who were chasing all running forward, past the camera.

Describe two variations on the chase film, and explain why the chase film was significant in the history of film.

SPEAKING, Track 48

Now listen to a conversation between a student and his college adviser.

W: I'm glad to see you, Alan. I want to discuss your plan to transfer to the university in the fall.
M: OK.
W: It turns out that you still need a humanities course to complete your basic requirements.
M: I do?
W: Yes. Remember that philosophy class you dropped a while back? You never made it up, so you'll need to do that this summer.
M: This summer?
W: Yes. I suggest you take a literature course to meet the requirement.
M: Oh, no … I can't do it this summer. My best friend is taking his sailboat to Hawaii, and he wants me to go with him. We'll be gone all summer, so that means I can't go to school. Besides, I need the vacation.
W: Well … you want to go to the university, right? You need one more course to be able to transfer this fall.
M: But the sailing trip is a once–in–a–lifetime opportunity! And I've already promised my friend that I'd go with him.
W: Then you'll have to decide what's more important to you: going sailing or going to the university. I suggest you discuss this with your family, and with your friend. Perhaps they will help you decide.

Describe the man's problem and the suggestions his adviser makes about what to do. What do you think the man should do, and why?

SPEAKING, Track 49

Now listen to part of a talk in a nursing class. The professor is discussing immunization.

Before we had immunizations, thousands of children and adults died or were disabled from diseases that are now almost completely eliminated. The results of worldwide immunization programs are amazing, making this the greatest success story in medical history.

Immunization works by strengthening the immune system against a specific disease in a much safer way than the disease process itself. In order to control a disease, we have to immunize at least 80 percent of the population. If we fall below 80 percent, the disease will find enough human hosts where it can live and flourish. Immunizing an entire population can eliminate bacteria or viruses that survive only if they have a human host.

The methods for developing vaccines against bacterial diseases were available in the early 1900s. Researchers had discovered how to isolate bacteria and grow them in the laboratory. This led to experiments with vaccines that caused the body to produce antibodies against certain bacteria. Soon we had safe vaccines against the typhoid, cholera, tetanus, and tuberculosis bacteria.

For diseases caused by viruses, some of the first successful immunizations were for smallpox, rabies, and yellow fever. The polio vaccine took a long time to develop because this virus couldn't be grown outside the living human body. Efforts to isolate the poliovirus and develop a vaccine were finally successful in 1955. By this time, we had methods for cultivating viruses in the laboratory using animal tissues such as eggs. We could then develop vaccines against other viruses such as measles.

Using points and examples from the talk, explain how immunization works and how vaccines were developed against various diseases.

QUIZ 7 (p. 362)

SPEAKING & WRITING, Track 1

What book have you read that you would recommend to others? Explain why you think other people should read this book. Include details and examples to support your explanation.

SPEAKING & WRITING, Track 2

Some people have a few favorite foods that they eat most of the time. Others are always trying new dishes and styles of

cooking. Which do you prefer and why? Include details and examples in your explanation.

SPEAKING & WRITING, Track 3

Now listen to two students as they discuss the proposal.

W: Have you heard about the proposal to limit our course load?
M: Yeah. But I don't really see why it's necessary.
W: I don't either. So what if people want to take more than 20 credits? I've done it twice already, and I never had any problem finishing the work. It's hard, I mean you're working all the time, but if you manage your time well, you can do it.
M: It's not something I'd want to do, but I can see your point.
W: Actually, this proposal is kind of a problem for me because I need only 21 more credits to graduate. I was hoping to graduate this spring. If I'm only allowed to take 20 credits, that makes it impossible for me to graduate. I'd have to go to summer school.
M: Oh, that's too bad.
W: And if I take a class this summer, that's more tuition I have to pay. I don't want to ask my family for any more money. So this new policy causes a financial problem for me. I think I'll go hear the dean speak, but I also have some tough questions to ask her.

The woman expresses her opinion about the proposal. State her opinion and explain the reasons she gives for holding that opinion.

SPEAKING & WRITING, Track 4

Now listen to part of a talk in a meteorology class.

Now we have evidence that forest fires are a factor in climate change. Forest fires send chemicals into the air, and these chemicals might affect atmospheric chemistry in a manner similar to—and on the same scale as—the effect of chemicals from volcanic eruptions.

Like the ash from volcanic eruptions, the smoke from forest fires spreads over large areas and goes very high. New data show that smoke can reach the upper levels of the atmosphere. The smoke from a forest fire in Canada reached into the stratosphere. And sulfurous chemicals from the fire caused effects similar to what we see after a volcanic eruption.

What happens is, powerful, rising air currents in the thunderstorms carry fire debris up into the upper atmosphere, where the sulfur and other chemicals can affect conditions. Some of the effects are cloud formation and climate change.

We're still in the early stages of understanding the role of forest fires in climate change. Yet these two points are clear. First, the effect of fires on climate is likely to grow as warming temperatures cause more fire outbreaks in northern latitudes. Second, there's an important difference between volcanoes and forest fire. We can't control volcanic eruptions, but we can control and reduce the number of wildfires.

Explain how forest fires are related to climate change, and compare this to the effect of volcanic eruptions.

SPEAKING & WRITING, Track 5

Now listen to a conversation between a student and a professor.

M: Hi, Professor Hogan, do you have a minute?
W: Of course, Dustin. What can I do for you?
M: I have trouble remembering the material from class. When I listen to your lectures, I understand everything, but then I always forget it during the tests.
W: Do you take notes in class?
M: Yes, but sometimes I can't understand my notes when I look at them later.
W: Hmm. I can suggest a couple of things. First, you should review your lecture notes as soon as possible after class, when the material is still fresh in your mind. Our class ends at noon. If you can, look over your notes while you're eating lunch. That's a good time to underline things, and make notes to yourself about things to look up later or ask about in class.
M: OK.
W: And the other thing is to get enough sleep. Take a short nap, not in class, but after you've been studying for a few hours.
M: But won't I forget what I just studied?
W: Believe it or not, sleeping helps you remember what you just studied. So, it's a good idea to study in the evening and then get a good night's sleep.

Describe the man's problem and the two suggestions the professor makes about how to solve it. What do you think the man should do, and why?

SPEAKING & WRITING, Track 6

Now listen to part of a lecture in a marketing class.

Manufacturers choose different ways to present their goods for sale. The three main ways of selling goods are direct sales, retail sales, and wholesaling.

Direct sales take place away from a store. Direct sales usually take place in the customer's home, although sometimes it's in a business setting. Direct sales include the activities of door–to–door salespeople and real estate agents. Other examples are catalog shopping, telemarketing, and at–home Internet shopping.

The second type of sales—retail sales—take place in stores. Department stores, discount chains, supermarkets, hardware stores, car dealerships, drugstores, convenience stores—all of these are retail stores, where consumers directly purchase small quantities of goods. Most manufacturers choose to sell their products through retail stores because they're a convenient way for consumers to buy. Consumers can inspect merchandise and take their purchases with them. They can exchange or return things easily. They can ask sales clerks for advice about products, or about how something works.

The third type of sales is wholesaling—where goods are sold below the retail or direct–sale price. Wholesale prices are lower because customers are buying in large quantities or in a low overhead setting. Wholesalers operate in a variety of ways. Some have their own outlet stores where they sell directly to consumers. Others send sales representatives to retail stores that buy goods at wholesale prices and then mark them up for resale. Because it's difficult for a manufacturer to contact every buyer directly, wholesaling is the most practical method for the widespread distribution of goods.

Using points and examples from the lecture, explain the three main ways that manufacturers sell goods to consumers.

QUIZ 8 (p. 366)

SPEAKING & WRITING, Track 7

What is the best gift you have ever received? Describe this gift and explain its importance to you. Include details and examples in your explanation.

SPEAKING & WRITING, Track 8

Some students like to study for a long period of hours at a time. Others divide their study time into many shorter sessions. Which method do you think is better for studying and why? Include details and examples in your explanation.

SPEAKING & WRITING, Track 9

Now listen to a college counselor as he speaks to prospective students about scholarship applications.

If an essay is required for your scholarship application, start writing it far in advance of the deadline. You'll go crazy if you wait until the last minute to write different essays for each scholarship you apply for. If an essay is not required, write one anyway and attach it to your application. Compose a general statement that tells why you want to follow a particular program of study, and then explain how your talents and interests match what the program has to offer. Doing this will let the scholarship committee understand more about you and your goals, and may boost your chance of winning the scholarship.

Regarding letters of recommendation, ask people for recommendations early, before they're flooded with other requests. Ask teachers, counselors, and employers who know you as an individual. This personal touch will help the writers create a more complete picture of you. If recommendations are not required, get one or two anyway—they might be useful for future applications.

The counselor expresses his views on scholarship applications. State his views and explain the reasons he gives for holding them.

SPEAKING & WRITING, Track 10

Now listen to part of a talk on this topic in a psychology class.

One fascinating thing about crowd behavior is, how a crowd ends up isn't always clear at the beginning. Crowds have what's known as an emergent quality—the possibility of several different outcomes emerging from the situation. For example, the crowd could just break up, or it could turn angry, or the police could break it up, or it could become a riot.

An expressive crowd shows strong emotions, and these feelings can be either positive or negative. You've probably been at events, for example, when the musicians at a concert were drowned in cheers, or, on the other hand, maybe they were booed off stage. This sort of thing is an emergent quality. And maybe you've even been in crowds where emotions got out of hand, and everyone stormed the stage, or tore down the goal-posts. When this happens, the crowd becomes out of control.

But not all expressive crowds are out of control. Some are organized into demonstrations for or against a specific goal. Demonstrations usually have their own rules of behavior, such as marching and chanting—although they, too, can become unpredictable. That's their emergent aspect. Some elements of crowd behavior that lead to emergent possibilities include a lack of certainty about what to do next and the spread of a feeling that something should be done. This leads to a particular mood based on that uncertainty, and finally, to a breaking of the rules.

Describe the emergent quality of crowd behavior, and explain why some crowds behave in certain ways.

SPEAKING & WRITING, Track 11

Now listen to a conversation between two teaching assistants.

M: Hi, Molly. How are you?
W: I was afraid you'd ask. Things couldn't be much worse. Dr. Carter just gave me about forty student papers to grade, and she wants them all done by the end of this week! And I also have to write my term paper for biology by Friday. And I have a big test in another class! I don't see how I can get it all done. If I finish grading all the papers, I'll never have time to do my own work.
M: Wow. You'd better ask Dr. Carter for more time to grade the papers.
W: Hmm. I could, I suppose, but she said she really needs these papers done.
M: Oh. Well, why don't you talk to your biology professor and ask for more time to write your paper? Professors understand. They know how overworked we are.
W: I already know what he'll say: No late papers. He's very strict about that.
M: Well, then just try your best to get it all done. If I were you, I'd grade the student papers first. Set a time limit for each one, and don't spend any more time than that. I wish you luck
W: Thanks. It looks like I won't be getting much sleep this week.

Describe the woman's situation and the suggestions the man makes about how to manage it. What do you think the woman should do, and why?

SPEAKING & WRITING, Track 12

Now listen to part of a lecture in an ecology class. The professor is discussing abiotic factors in ecosystems.

Ecosystems are made up of both living and nonliving components. The nonliving—or abiotic—components of ecosystems include various physical factors such as sunlight, rainfall, temperature, and wind, as well as chemical nutrients in the water, rocks, and soil that living things need to survive.

Sunlight provides the energy that drives ecosystems, and almost all forms of life get their energy from sunlight. Plants use sunlight directly in photosynthesis. Light is important to the development and behavior of many plants and animals that are sensitive to the relative lengths of day and night. The length of daylight is a signal for seasonal events, such as the flowering of plants and the migration of birds.

Rainfall and temperature affect habitats and food supplies in several ways. Climate greatly influences the plant community, which then determines the availability of food, nest sites, and shelter for animals. Air temperature is an important factor because of its effect on biological processes and the ability or inability of organisms to regulate their body temperature. Only some plants and animals can maintain an active metabolism at very low or very high temperatures.

The abiotic factor of wind increases the effects of air temperature on organisms by increasing heat loss—what we call the wind chill factor. Wind also causes water loss in organisms by increasing the rate of evaporation in animals and transpiration in plants.

Rocks and soil are important abiotic components of ecosystems. Their physical structure and chemical composition limit the populations of plants, and also the animals that feed upon plants. Thus, rocks and soil contribute to the irregular distribution of plants and animals in ecosystems.

Using points and examples from the lecture, explain how various abiotic factors in ecosystems affect plants and animals.

PART 4 – WRITING

4.1 INTEGRATED WRITING: CONNECTING INFORMATION FROM TWO SOURCES

Do You Know (p. 379)

SPEAKING & WRITING, Track 13

Now listen to part of a lecture on the same topic.

One thing that really concerns water resource analysts is how much water agriculture uses. Agriculture uses a lot of water, more than all other water–using sectors of society. One of our greatest concerns is the very high use of water by irrigation. This is because, in most cases, the water used for irrigation can't be used afterward for other purposes, such as water supply for homes or industry.

Some forms of irrigation use water more efficiently than others. The efficiency of water use varies by region, crop, agricultural practice, and technology. The least efficient types of irrigation are the surface methods. Your reading really didn't go into this, but think of how much water it takes for a traditional surface method like field flooding. It takes a lot of water to flood a field. The water collects into ponds or basins, but then most of it either evaporates into the air or passes down through the soil into groundwater. This means that, in lots of places, less than half of all the water applied to a field is actually used by the crop. The rest is lost to evaporation or to groundwater. All of the flooding methods generally waste a lot of water—water that could otherwise be used for other purposes.

Fortunately, there are several irrigation technologies that are more efficient than the poorly controlled and highly wasteful flooding methods. They range from sprinkler systems to drip irrigation. In sprinkler systems, water is sprayed over crops, and this provides an even distribution of water. New precision sprinkler technologies have greatly improved our ability to deliver water exactly when and where it's needed. However, sprinkler systems are also a form of surface irrigation, and just as in other surface methods, some of the water is still lost to evaporation.

Summarize the points made in the lecture, explaining how they cast doubt on points made in the reading.

Exercise 4.1A (p. 380)

SPEAKING & WRITING, Track 14

Now listen to a professor talk about corneal injuries.

Your cornea can be injured by any number of causes. If something hits you in the face—like a ball, a fist, or the dashboard of your car during a traffic accident—your cornea can be injured, and so can the other sensitive tissues around your eye. Any flying debris can be a cause of corneal injury. If you're working with a table saw or … any other machine that creates flying debris, one or more small pieces could fly into your eye. Another cause is getting certain chemicals in the eye. A lot of chemicals—like ammonia or chlorine—can injure corneas. So can ill–fitted or poorly cleaned contact lenses. Even ordinary dust can scratch your cornea if you rub your eye when there's dust in it.

Dryness or allergies can cause your cornea to become inflamed. Corneal ulcers can result from injury or chronic dryness, or from infection with a virus, bacteria, fungus, or protozoa, or—this is rare—from a nutritional deficiency.

You can get the corneal injury known as keratitis if you wear hard contact lenses for too long, or if your eyes are exposed to too much ultraviolet light. If you have keratitis, it means the cells on the outer layer of your cornea die. A common cause of keratitis is overexposure to ultraviolet light—which can come from the sun, a sunlamp, or even a welding arc. If the cause is exposure to ultraviolet light, the symptoms might not show up until a couple of hours after the exposure stops. Keratitis can be treated. Your eye doctor might prescribe antibiotic ointment or drops … or artificial tears, and you might have to wear an eye patch until your cornea can heal.

Describe the causes and consequences of corneal injuries and ulcers, and explain how these problems are treated.

Exercise 4.1.B (p. 381)

SPEAKING & WRITING, Track 15

Now listen to an urban forester talk about pruning trees.

One of my clients has a silver maple in the front yard. The tree is diseased and hazardous because it was the innocent victim of tree topping. Topping—the cutting off the top and the ends of major branches—usually creates more problems than it solves. My client's silver maple was first topped about 15 years ago and then again a few years back. Because of the bad pruning it received in the past, the tree now has seven gangly, 300–pound limbs. The big limbs stretch out over the house and the driveway, and any one of them could crush a car. This tree is dangerous and has to be removed.

This tree should have one main trunk with three or four sturdy main branches. Instead, it has seven weak limbs. It should have been left alone to grow, with an occasional light pruning, not the chainsaw topping it got. In most cases, tree topping is done because people just don't know any better. They don't understand pruning. They think that cutting off the big branches at the ends will solve their problems. Instead, it causes new problems and hurts the tree.

How does topping hurt trees? Well … first of all, topping won't keep a tree small. The growth rate of a tree speeds up once it's topped, and within a few years, the tree is close to its original size. Second, topping is very stressful for the tree. The tree is more likely to be infected by diseases and insects. Topping removes too many of the leaves, which are the tree's food factories, and so large–scale removal of leaves will starve the tree. Also, trees that are badly pruned can become a hazard—like my client's silver maple. The shoots that grow back after topping are weak limbs that break off easily in wind and snowstorms. And finally, topping a tree destroys its natural shape. It turns a beautiful branching tree into an ugly eyesore.

Of course, there are times when tree topping has to be done. But usually topping creates more problems than it solves, and it's the perfect example of bad pruning.

Summarize the points made in the talk, explaining how they depart from good pruning practices.

4.2 INTEGRATED WRITING: TAKING NOTES

Focus (p. 383)

SPEAKING & WRITING, Track 16

One thing that really concerns water resource analysts is how much water agriculture uses. Agriculture uses a lot of water, more than all other water–using sectors of society. One of our greatest concerns is the very high use of water by irrigation. This is because, in most cases, the water used for irrigation can't be used afterward for other purposes, such as water supply for homes and industry.

Exercise 4.2.A (p. 385)

SPEAKING & WRITING, Track 17

Now listen to part of a lecture on the topic you just read about.

The International style dominated commercial architecture for most of the twentieth century. The International style was the style of the modern city. We can see the results in New York City today. Most of New York's skyline is made up of tall, straight, severe, glass–and–steel towers. These towers so completely dominate the cityscape that they shade the city streets. A person walking on the street is completely overpowered.

Strict simplicity is the defining feature of the International style, but it takes the idea that "form must follow function"—it takes this idea to an extreme. In the hands of a true master, the style has creative potential. However, there aren't that many true masters. And starting almost immediately, what we saw was the uglification of the office building … to the point where the glass box became not only ugly but also ridiculous.

The International style started an explosion of cheap imitations. Take the UN Secretariat building. It's a beautiful building on its own. It has an elegance that commands respect. But this type of beauty was turned into something cheap and vulgar because we saw too much of it. It lost its elegance and became, well, a little boring.

The philosophy of the International style is summed up in the familiar phrase "less is more." But is less really more? "Less is more" inspired thousands of starkly simple buildings. In large numbers, and especially when they dominate a city's skyline, these buildings can be ugly and uninspiring, even cold and unfriendly—more machine than human.

Critics of the International style saw its ugliness very early on. The glass box received a great deal of negative criticism—not only from the public but also from professional architects. One of the greatest architects, Frank Lloyd Wright, said, "Less is more … where more is no good." Robert Venturi was even harsher when he said, "Less is a bore."

Summarize the points made in the lecture, explaining how they agree or disagree with points made in the reading.

Exercise 4.2.B (p. 386)

SPEAKING & WRITING, Track 18

Now listen to a geology professor talk about geothermal energy.

The first use of geothermal energy in North America probably took place more than ten thousand years ago. This is when aboriginal people settled around mineral hot springs. The hot springs served as a source of warmth, also cleansing and healing. Hot springs were so important to aboriginal North Americans that they were considered neutral zones—places where members of warring tribes could bathe together in peace. In European history, people also valued hot springs for their healing powers. For example, the Romans used geothermal water to treat eye and skin disease and also to heat buildings at Pompeii.

Today, humans benefit in a much different way from this important natural resource. Ever since the world's first geothermal–generated electricity was produced in Italy in 1904, we've tapped geothermal heat as a power source. Geothermal heat can generate electricity without the harmful fossil–fuel emissions that cause pollution and climate change. In geothermal power plants, the physical force that spins turbine blades is steam, heat, or hot water from within the earth.

Another use of geothermal energy today is direct use of hot water. Direct use involves taking heated water—without a heat pump or power plant—and using it for industrial processes, or to heat buildings and greenhouses, or to supply heated mineral water for health resorts.

The concentration of geothermal energy has to be very high in order to make heat extraction economical for a nation. Geothermal sites around the world aren't all equal in their power potential. The best places for developing geothermal energy systems are regions that are volcanically active, like places around the Pacific Rim and in certain parts of Europe. For example, Iceland is a geologic hot spot, where geothermal energy is used to heat almost every home in the nation.

Describe past and present uses of geothermal energy, and explain why some regions have better potential than others for developing geothermal systems.

4.3 INTEGRATED WRITING: DEVELOPING IDEAS

Exercise 4.3.A (p. 393)

SPEAKING & WRITING, Track 19

Now listen to part of a talk in a business management class.

Research has taught us a lot about the motivation of workers. We've learned that workers have needs and expectations that go beyond economic concerns. We know, for example, that an informal social organization among workers is important. If you ask ten people what they like or don't like about their job, around eight will mention the people they work with.

The small work group fills important social and emotional needs of workers. By definition, the small work group—I mean a group of usually around three to fifteen people with one lead person. And what takes place within that group affects attitudes, motivation, productivity, and the quality of the company's product or service.

Managers have to face this reality if we want to have a highly motivated workforce. We have to accept that workers deserve to have a voice in the decisions that affect them. For example, workers should be able to participate in the setting of goals and the evaluation of results. If workers have a say—especially within the work group—they feel a greater sense of pride in their work.

Workers need a sense of security and community in the workplace. Security comes from confidence in the system that they're part of, the quality of the product or service they provide, and the reputation of the company. A sense of community grows when workers get recognition for their accomplishments and when they believe their skills are being well used.

A lot of people resent the big, impersonal systems that dominate their lives. They feel angry at the unseen power holders in management, at the administrators who make decisions about them but don't actually know them. And people feel alienated when they have no voice. Anything that managers can do to help workers feel they have some control over what happens during the work day—anything to promote worker satisfaction—will be good for the company.

Summarize the points the professor made in the talk, explaining how they support points made in the reading.

Exercise 4.3.B (p. 394)

SPEAKING & WRITING, Track 20

Now listen to part of a lecture on this topic in a psychology class.

Today, phrenology is no longer thought of as a real science. We can easily see the mistakes in Gall's doctrine. We know, for example, that the sheer size of the brain has no clear connection to an individual's intellect. In fact, people with very small brains have achieved great success, just as people with very large brains are sometimes mentally retarded. Moreover, we've come to understand that the size and shape of the skull isn't a precise measure of the function of the human brain.

But even though we can see the flaws in Gall's claims, we shouldn't dismiss his ideas completely. After all, Gall was among the first modern scientists to state that different parts of the brain control different functions. The fact that we still don't know the specific relationship between size, shape, and function of the brain doesn't mean we won't ever be able to figure it out.

Other scientists have demonstrated a clear relationship between specific types of brain injury and specific mental impairments. One showed that damage to a certain area in the left side of the brain causes a person to lose the ability to speak. Others showed that one kind of injury affects reading ability, while another kind of injury affects the person's ability to name things, or to repeat words and phrases. So, we can see that Gall was wrong about the shape of human skulls, but right about the fact that different parts of the brain serve distinct functions.

Gall was right about other things too. For example, he claimed that we don't …uh … have general mental powers … but instead we have several different forms of power for each of our mental abilities. What he meant was, each of us has many separate skills for memory, language, music, vision, et cetera. And in the 200 years since Gall, there've been several other theories of multiple forms of intelligence.

Summarize the points made in the lecture, explaining how they either support or refute points made in the reading.

Exercise 4.3.C (p. 395)

SPEAKING & WRITING, Track 21

Now listen to part of a talk on this topic in a film history class.

George Méliès invented several techniques that have now become basics of filmmaking. One of these is the special effect of stop-action photography. Méliès discovered stop action almost by accident. He bought a camera and started filming everything in sight—crowds, traffic, fire engines—anything that moved. One day, while he was filming a truck moving down the street, his camera jammed. By the time he got the camera working again, there was a hearse where the truck had been before. Later, when he watched the film, what he saw was a truck turning magically into a hearse. So, it was by chance—a camera jamming—that he invented stop action.

Another technique Méliès introduced was animation, which we can see in his most famous film, A Trip to the Moon. In the animated sequence, we see the moon in the distance and a spaceship moving toward it. As the spaceship moves closer, the moon becomes larger and larger until it's giant-sized. The moon gradually takes on the shape of a living, grotesque, smiling face. Suddenly the spaceship lands in one of the moon's eyes. The animated face frowns and grimaces, and then huge tears flow from the eye. It's really an amazing sequence, especially when you realize it was made over a hundred years ago!

Méliès realized very early on that films were stories told in scenes, and scenes could be staged for the camera with the aid of painted scenery and elaborately designed costumes. One of his most important contributions was to extend the length of films to tell a story. Before this, a film was a single shot, complete in itself, and usually ran for only a minute or less. But Méliès put several scenes together into a single story for the first time in 1899 in Cinderella. The various scenes in Cinderella were linked by dissolves—a technique where one scene fades out while the next scene appears behind it and grows clearer as the first one disappears. This technique is also called overlap dissolve because one scene overlaps another.

Summarize the points made in the talk, explaining how they illustrate points made in the reading.

4.5 EVALUATING THE RESPONSE

Exercise 4.5.A (p. 403)

SPEAKING & WRITING, Track 22

Now listen to part of a lecture in a biology class.

As soon as we developed antibiotics, new strains of bacteria appeared that were resistant to some or all of the drugs. Hospitals started using antibiotics regularly in the 1950s, but resistance started appearing within a few years. Today, one-third of the patients in hospitals are on antibiotics, but antibiotic resistance is increasing the danger of hospital infections—to the point where people are almost safer staying home than going to a hospital.

In the forties, penicillin really was a wonder drug. Back then, you could give a patient with bacterial pneumonia ten thousand units of penicillin four times a day and cure the disease. Today, you could give 24 million units of penicillin a day, but the patient might still die. Why? Well, in a way, bacteria are smarter than us. They evolve to counteract any drug we attack them with. A lot of bacteria are now completely resistant to penicillin.

Bacteria can evolve very effective weapons against antibiotics. Some of them develop enzymes to match every antibiotic we throw at them. All these weapons and counter-weapons match one another—just like the weapons in real military warfare. So, no matter what antibiotic we use, the bacteria will come up with a way to make it useless.

How does this happen? Well, if you douse a colony of bacteria with an antibiotic, the colony will be killed—that is, all except for a few cells. A few cells will survive because they carry a resistance gene for that particular antibiotic. The surviving cells quickly multiply, and they pass along this lucky gene to their offspring. And soon you have a new strain of bacteria that's resistant to that drug.

One consequence of antibiotic resistance is the reappearance of tuberculosis as a major illness. Twenty years ago, doctors thought tuberculosis was a defeated disease. Since then, however, new cases of tuberculosis have increased by 20 percent. And several strains of the disease are resistant to any drug we can attack them with.

Summarize the main points made in the lecture, explaining how they differ from points made in the reading.

QUIZ 1 (p. 407)

SPEAKING & WRITING, Track 23

Now listen to a psychology professor talk about the reading.

Scientists who study animal behavior have always had a problem coming up with a reasonable definition of self-awareness. Is self-awareness the same as self-recognition? If an animal recognizes itself in a mirror, does that mean the animal is self-aware?

The mark test has been repeated on many different species. The results of experiments on other animals at first seem consistent with the idea that self-recognition is a higher mental ability that only humans and the great apes possess. But further testing with chimpanzees produced results that were inconsistent. For example, one study with eleven chimpanzees found only one who touched the mark during the test. Why were those results so different from others that showed a high rate of chimps touching the mark?

There are some basic problems in interpreting the results of all these experiments. One is that chimpanzees perform these very same behaviors routinely, whether there's a mirror there or not. All chimpanzees touch their heads and faces a lot. In the experiment with the eleven chimpanzees, one chimp rubbed his head while coming out of the sleeping drug. He rubbed the mark off even before he had the chance to see it in the mirror—thus confounding the test results and making it impossible to conclude anything.

Another problem is that some of the behaviors we call self-aware are also social responses that chimpanzees show in the presence of other chimpanzees. Self-grooming in many primates is a social behavior. For example, when monkeys are put in a cage with a mirror along one wall, they show an increase in the amount of self-grooming. But so do monkeys in a cage next to another of the same species—when they can see the other monkey through a window.

So … what does this mean? It means that we can't always tell from an animal's behavior whether the animal is reacting in a "self–aware" manner to a mirror image as an image of itself, or whether it's reacting "socially" to the image as that of another animal.

Summarize the points made in the talk, explaining how they cast doubt on points made in the reading.

QUIZ 2 (p. 408)

SPEAKING & WRITING. Track 24

Now listen to part of a lecture on the same topic.

The main advantage of wind power is that it's a clean source of energy. Wind power can decrease our dependence on fossil fuels, which is critical to the health of all living things. Using wind power instead of coal, oil, and gas means fewer emissions of greenhouse gases like carbon dioxide. It also means lower emissions of sulfur and other gases that cause smog and acid rain. So, more wind power means less smog and soot, less acid rain, and fewer emissions that contribute to global warming.

Wind power is also getting affordable enough to compete with inexpensive coal and oil. This is because better turbine technology has helped reduce the cost of wind energy by more than 80 percent since the 1980s. In several places around the world, energy companies offer wind–generated electricity at a cost that's almost half the cost for coal power, and around one–fifth the cost for nuclear power. And where coal and nuclear power both threaten the environment, wind power is clean.

However, even though wind energy is now more affordable, more available, and pollution–free, it does have some disadvantages. One is that wind power has the same lack of energy density as direct solar radiation. Wind as a source of power is very spread out, and this means it would take large numbers of wind generators—and thus large amounts of land—to produce heat and electricity in useful amounts. We can't build wind turbines everywhere, simply because lots of places aren't windy enough to generate power.

Another disadvantage is the high number of birds killed by the blades on wind turbines. One study found 182 dead birds on a wind farm in California. The wind industry is responding by modifying the equipment so it's safer for birds. They're coming up with solutions like reducing the number of places for birds to sit on turbines, spacing the turbines farther apart, and painting patterns on the blades that contrast with the surrounding landscape, so the birds can see the blades and will avoid flying into them.

Summarize the advantages and disadvantages of wind power discussed in the lecture, explaining how they agree with or depart from points made in the reading.

QUIZ 3 (p. 409)

SPEAKING & WRITING. Track 25

Now listen to part of a lecture given by an economics professor.

The gloomy theory of Thomas Malthus caused economics to be called "the dismal science." Malthus said that food production can't keep up with the growth of population. He predicted that the amount of food per person would decline as population increased. But the statistics of economic history reveal that Malthus was dead wrong. Just as he was making his prediction of gloom and doom, the countries of Europe and North America were beginning their century and a half of tremendous growth in real wages, life expectancies, and living standards.

Malthus said that as population keeps doubling, it's like the globe keeps shrinking to half its size—until finally it shrinks so much that food production falls below the level necessary for life. There are several flaws in this theory. One problem is that, despite his careful use of statistics, Malthus left out important factors. For example, he never predicted the advances in technology during the Industrial Revolution. In the century after Malthus, new technology increased food production tremendously in Europe and North America. This rapid change allowed food output to far exceed population growth. And this led to an increase in real wages and a higher standard of living. And Malthus didn't predict that … in most Western nations, living standards and real wages would grow most rapidly, just at the same time that population growth began to decline.

Most economists today disagree with the Malthusian idea that population would shoot up quickly if the negative checks of disease, famine, and war declined. The history of developed countries proved Malthus was wrong. Because of improvements in education and birth control, population growth has stabilized in most developed countries. Malthus and his followers have been criticized on several grounds, but especially for ignoring the possibility of technical advance and for overlooking the importance of education and birth control as a way to lower population growth.

Summarize the points made in the lecture, explaining how they contradict points made in the reading.

QUIZ 7 (p. 442)

SPEAKING & WRITING. Track 26

Now listen to a photography instructor talk about pictorial photography.

Since the pictorial awards are usually the most desired in the photography contest, I thought I'd say a word about composition. A pictorial photograph is one with a successful composition. You can have the most interesting subject in the world, but unless the subject is well composed it won't have the impact of good composition. For example, you can have a shot of a beautiful child sitting on a bench in the park, but if the signpost behind her looks like it's growing out of her head, it's not a good composition.

Let's go over the elements of composition. First, balance—remember that a photograph is balanced if it has similar amounts of light and dark areas, or if one interesting detail balances another.

Another important element is placement—the location of the main focal point of the picture. The best placement is generally not right in the center of the frame. Instead, the four points just above and below, both to the right and left of center—these are the strongest choices for the main point of interest.

Color is important to composition. Generally, warm colors are stronger than cool colors. A small amount of red—a warm

color—will balance a larger area of green or blue, which are cool colors.

Finally, concerning detail, remember that a few bold masses balancing each other are more satisfying than a large number of details spread evenly throughout the composition.

Now, I ask you to imagine this scene: a white house stands on a cliff, a few seabirds soar in a vast blue sky overhead, a few clouds float high on the left, a tiny wave breaks at the bottom of the cliff, down in the right corner. All objects of the composition—the house, the cliff, the sky, the clouds, the birds, the waves, and the spaces between the objects—all combine to create a mood. The composition is balanced and complete. You can see that everything in the photograph is an essential part of the composition. This is a pictorial photograph.

Summarize the points made by the instructor, explaining how they illustrate points made in the reading.

QUIZ 8 (p. 444)

SPEAKING & WRITING, Track 27

Now listen to a psychology professor's response to the reading.

So … when children grab for their favorite toys, what's guiding them? Is it social conditioning, or is it nature?

Research shows that two-year-old boys like to play with dolls and kitchen sets as much as little girls do. Still, by age five or so, most will tell you those toys are for girls. The older they get, the more children will say that a certain toy is either for girls or for boys. How do they learn this? Are they really conditioned by society in a sexist scheme, as the reading suggests?

I believe—and research supports this—that a child's choice of toys is a natural occurrence, not a sexist plot by society. Studies show that monkeys, like children, pick their toys based on gender. When male and female monkeys were given a wide choice of toys to play with, male monkeys spent more time playing with cars and balls, and females spent more time with dolls and pots.

In one study of human children, researchers observed children playing with toys in a preschool class. There were eight boys and three girls in the class. During the hour for free play, two of the girls usually went straight to the kitchen area and stayed there most of the hour. One girl usually sat at the table, coloring and drawing pictures. The boys usually spent most of the hour with blocks—building towers and then knocking them down.

I'll briefly summarize the rest of their findings. First, they observed that younger children of both sexes play with both dolls and trucks, with no apparent thought of being a boy or girl. But around age five, the boys start moving away from kitchen play, and the girls start ignoring cars and trucks. Older kids of both sexes like blocks. And … sometimes kids will hear that they shouldn't play with something because it's a boy or girl toy. Sometimes an older kid tells them; sometimes it's a parent.

So, it seems that parents and older children do reinforce the gender stereotypes to some extent. But still, despite some minor evidence of social conditioning, the research supports the idea that most boys and girls are naturally drawn to different types of toys, and it doesn't matter what their parents and society teach them.

Summarize the points made in the talk, explaining how they agree or disagree with points made in the reading.

TEST 1

TEST 1, Track 1

LISTENING SECTION DIRECTIONS (p. 460)

The Listening section measures your ability to understand conversations and lectures in English. You will hear each conversation and lecture only one time. After each conversation or lecture, you will hear some questions about it. Answer all questions based on what the speakers state or imply.

You may take notes while you listen. You may use your notes to help you answer the questions.

Most questions have four possible answers. In some questions, you will see this icon: 🎧. This means that you will hear, but not see, part of the question.

Some questions have special directions, which appear in a gray box. Most questions are worth one point. If a question is worth more than one point, special directions will indicate how many points you can receive.

You have approximately 40 minutes to complete the Listening section. This includes the time for listening to the conversations and lectures and for answering the questions.

To make this practice more like the real test, cover the questions and answers during each conversation and lecture. When you hear the first question, uncover the questions and answers.

TEST 1, Track 2

Questions 1 through 5. Listen to a conversation in a university office.

M: Good afternoon. May I help you?
W: Yes, I hope so. My name is Jennifer Taylor, and I'm in the communications program. Our class is doing a radio program, and we'll have interviews with a lot of people from all parts of campus life. We'd like to interview the new Dean of Students, if he's willing.
M: Hmm. That sounds interesting.
W: I hope Dean Evans will agree to meet with us, and let us tape the conversation for the radio. It would be a way for the whole community to get to know him, get to know his ideas and everything … like the kind of vision he has for the university.
M: How much time would you need?
W: Oh, probably about an hour, no more than that.
M: Hmm. I'm sure the dean would like to participate, but … uh … you know, his schedule is pretty tight.
W: Oh, I was afraid of that. Um …
M: He's tied up all this week. Everybody wants to, you know, get acquainted. But we can probably work something in. When would you like to do the interview?
W: The radio station can air the show on either the 16th or the 23rd, so we'd have to work around that.
M: Let me look at the dean's schedule … Let's see … it looks like he's got a lot of meetings this week, and, well, most of next week, too. What about the week after that? He doesn't have anything scheduled on Tuesday or Wednesday afternoon. Would either of those days work for you?

W: Um, yeah, I think so. How about Tuesday afternoon?
M: On Tuesday, he's free from two o'clock till four–thirty.
W: Let's see. I'll be in class until two–thirty, so how about three?
M: All right. Three o'clock, Tuesday, April 15.
W: OK, that will be great. Thank you so much. This will be a great way for everyone to learn about our new dean. We really appreciate the opportunity to do this.
M: You're really quite welcome. It's our pleasure. In fact, I've put it on the dean's calendar, and we will see you on the 15th.
W: The 15th. OK. Thank you very much.

1. What is the purpose of the conversation?
2. Why does the man say this:
   "I'm sure the dean would like to participate, but … uh … you know, his schedule is pretty tight."
3. Why does the woman want to meet with the dean?
4. What can be inferred about the dean?
5. When will the meeting with the dean take place?

TEST 1, Track 3

Questions 6 through 10. Listen to part of a conversation between two students. They are studying for an economics test.

M: OK … so what do we do next?
W: Why don't we go over the chapter on analysis of costs? That'll be on the test.
M: OK.
W: Let's start with "opportunity cost." That part's still confusing to me. I understand fixed cost and variable cost, and marginal cost, the cost of producing one more unit of something. I'm sure there'll be a question about that on the test. But I don't get "opportunity cost."
M: Opportunity cost—that's when you have to consider the things you give up when you make a certain decision. You have an opportunity cost when you're forced to choose between different alternatives.
W: OK. That sort of makes sense.
M: Say you want to have your own business, so you, so you open a restaurant. You put in 60 hours a week, but you don't pay yourself wages. At the end of the first year, your restaurant shows a profit of … um … say, 30 thousand dollars—looks pretty good for a small business. But is it really that good? An economist would say no, because you have to count your own labor as a cost, even if you don't get paid. You have to consider that you had alternative opportunities for work, and you have to count that lost opportunity as a cost. You could have taken a job at, say, an accounting firm and earned 50 thousand a year. This is the opportunity cost—the earnings you gave up—because you decided to open your own business instead.
W: OK. So what that means is … um … if I lost 50 thousand dollars by not taking an accounting job, then … my restaurant's profit of 30 thousand isn't that great after all—at least in an economic sense. Maybe I had more enjoyment, though—I mean the enjoyment of being my own boss.
M: Right. But your enjoyment comes with a cost. An economist would say the real profit of your restaurant isn't 30 thousand dollars. You'd have to subtract the 50 thousand opportunity cost of your own labor. When you subtract 50 thousand from 30 thousand, you find you have a net loss of 20 thousand dollars!
W: Wow! That means the enjoyment of having my own business cost me 20 thousand dollars!
M: Yeah. Something like that.
W: This is really different from what we learned about costs in my accounting class. I think an accountant would say my 30 thousand–dollar profit made me a viable business. But an economist—if I understand it correctly—an economist would say my business is a loser!
M: Right. And that's because an economist tries to look at all the factors, all the costs. An economist would count the opportunity cost.
W: An economist looks at the big picture.
M: Right. An economist's definition of costs is broader than an accountant's. Opportunity cost is actually a very broad concept. It takes into account the cost of the choices we make. When we choose one thing, we have to give up something else.
W: That's right. We chose to go to college, so that means we had to give up full–time employment, for the time being.
M: Right! So, how do you measure the true cost of a college education?
W: Well, it's more than what we pay for tuition and books! We have to subtract the income we lose by not working full time.
M: Yeah, and that's why college is really more expensive than it seems.

6. What are the students mainly discussing?
7. How does the man help the woman understand a concept that she finds difficult?
8. Listen again to part of the conversation. Then answer the question.
   "Say you want to have your own business, so you, so you open a restaurant. You put in 60 hours a week, but you don't pay yourself wages. At the end of the first year, your restaurant shows a profit of … um … say, 30 thousand dollars—looks pretty good for a small business. But is it really that good?"
   Why does the man ask this:
   "But is it really that good?"
9. According to the man, how does an economist's view of costs differ from that of an accountant?
10. What can be inferred about the true cost of a college education?

TEST 1, Track 4

Questions 11 through 16. Listen to part of a lecture in a geology class.

Mount St. Helens is in the Cascade Range, a chain of volcanoes running from southern Canada to northern California. Most of the peaks are dormant—what I mean is, they're sleeping now, but are potentially active. Mount St. Helens has a long history of volcanic activity, so the eruptions of 1980 weren't a surprise to geologists. The geologists who were familiar with the mountain had predicted she would erupt.

The eruption cycle had sort of a harmless beginning. In March of 1980, seismologists picked up signs of earthquake activity below the mountain. And during the next week, the earthquakes increased rapidly, causing several avalanches. These tremors and quakes were signs that large amounts of magma were moving deep within the mountain. Then, suddenly

one day there was a loud boom, a small crater opened on the summit. St. Helens was waking up.

The vibrations and tremors continued. All during April, there were occasional eruptions of steam and ash. This attracted tourists and hikers to come and watch the show. It also attracted seismologists, geologists, and—of course—the news media.

By early May, the north side of the mountain had swelled out into a huge and growing bulge. The steam and ash eruptions became even more frequent. Scientists could see that the top of the volcano was sort of coming apart. Then there were a few days of quiet, but it didn't last long. It was the quiet before the storm.

On the morning of May 18—a Sunday—at around eight o'clock, a large earthquake broke loose the bulge that had developed on the north face of the mountain. The earthquake triggered a massive landslide that carried away huge quantities of rock. Much of the north face sort of swept down the mountain.

The landslide released a tremendous sideways blast. Super–heated water in the magma chamber exploded, and a jet of steam and gas blew out of the mountain's side with tremendous force. Then came the magma, sending up a cloud of super–heated ash. In only 25 seconds, the north side of the mountain was blown away. Then, the top of the mountain went too, pouring out more ash, steam, and magma. The ash cloud went up over 60,000 feet in the air, blocking the sunlight.

Altogether, the eruptions blew away three cubic kilometers of the mountain and devastated more than 500 kilometers of land. The energy of the blast was equivalent to a hydrogen bomb of about 25 megatons. It leveled all trees directly to the northeast and blew all the water out of some lakes. The blast killed the mountain's goats, millions of fish and birds, thousands of deer and elk—and around sixty people. The ash cloud drifted around the world, disrupting global weather patterns.

For over twenty years now, Mount St. Helens has been dormant. However, geologists who've studied the mountain believe she won't stay asleep forever. The Cascade Range is volcanically active. Future eruptions are certain and—unfortunately—we can't prevent them.

11. According to the professor, how did the cycle of volcanic eruptions begin?
12. Why does the professor say this:
    "This attracted tourists and hikers to come and watch the show. It also attracted seismologists, geologists, and—of course—the news media."
13. Listen again to part of the lecture. Then answer the question.
    "By early May, the north side of the mountain had swelled out into a huge and growing bulge. The steam and ash eruptions became even more frequent. Scientists could see that the top of the volcano was sort of coming apart. Then there were a few days of quiet, but it didn't last long. It was the quiet before the storm."
    What does the professor mean when he says this:
    "Then there were a few days of quiet, but it didn't last long."
14. The professor explains what happened when Mount St. Helens erupted. Indicate whether each sentence below was part of the event.
15. What were some effects of the eruption?
16. What can be concluded about Mount St. Helens?

TEST 1, Track 5

Questions 17 through 22. A botanist has been invited to speak to a geography class. She will be discussing aromatic trees of North America. Listen to part of the talk.

When European explorers first approached the coast of North America, even before their ships landed, the first thing they noticed was the pungent aroma carried to the ships by the offshore breezes. Some sea captains thought this aroma was the scent of the valuable Oriental spices that had prompted their voyages of exploration. But in fact, the agreeable smells didn't come from spices; they came from the lush vegetation of the North American forests.

The fragrance came from the blossoms of numerous trees and from the volatile oils in pine sap. Pine sap is a resinous fluid that pine trees put out to heal wounds caused by wind, fire, and lightning, and also to protect the pine tree's seeds. Pine sap was a valuable commodity to the sailors who explored the coast. The smell of pine meant there was an abundant supply of what were known as naval stores—pitch and pine tar. Pitch and pine tar were thick, sticky, semi–solid substances that were made by distilling pinewood. Sailors used naval stores for caulking and waterproofing their wooden ships, which kept them seaworthy.

The Europeans found fragrant trees all along the Atlantic coast, from Massachusetts in the north to Florida in the south. Everywhere along the coast, the air was filled with the strong perfume of the flowering dogwood. The Native Americans already knew about the medicinal properties of the dogwood, and they used its bark and roots to treat malaria and other fevers. They brewed the aromatic bark into a bitter, astringent tea. European settlers also used the dogwood to relieve attacks of malaria. They soaked the dogwood bark in whiskey and drank the strong infusion. This was before they knew about quinine from South America, and before quinine became available.

In the south, probably the best–known aromatic tree was the sassafras. The sassafras is a fast–growing tree, a member of the laurel family. Like the other fragrant laurels—cinnamon, bay, and camphor—sassafras is noted for its aromatic bark, leaves, roots, flowers, and fruit. I have a sassafras twig with me here, which I'll pass around so you can all enjoy its smell. Just give it a small scrape with your thumbnail to release the scent. I think you'll find it strong but pleasant.

The Choctaw Indians used powdered sassafras leaves as a spice. Other Native American tribes used sassafras tonic as a cure for everything from fever to stomachache. News of this wonder tree reached Europe in the sixteenth century by way of the French and the Spanish, and sassafras was one of the first exports from North America to Europe. It sold for a high price on the London market, which sort of inspired other English explorers to … um … seek their fortunes in the North American colonies.

For centuries, sassafras enjoyed a fantastic reputation as a cure for almost every disease. Maybe you've heard of the medicinal spring tonic of the old days. Well, sassafras was a main ingredient in spring tonic—the stuff pioneer parents gave their kids. My grandmother had to take the spring tonic that her grandmother made from sassafras.

Sassafras leaves, bark, and roots used to provide the flavoring for root beer and chewing gum. Sassafras was also used in soaps and perfumes. However, in the 1960s, the United States Food and Drug Administration found sassafras oil to be a potential carcinogen for humans because it caused cancer in rats. Since that time, sassafras has been banned for human

consumption. No one really knows just how harmful it is to human beings, but some studies show that one cup of strong sassafras tea contains more than four times the amount of the volatile oil safrole that is hazardous to humans if consumed on a regular basis.

17. According to the speaker, what did European explorers notice as they sailed toward the shores of North America?
18. According to the speaker, why was pine sap a valuable commodity?
19. How was the flowering dogwood used?
20. Why does the speaker say this:
"Just give it a small scrape with your thumbnail to release the scent. I think you'll find it strong but pleasant."
21. Why was sassafras once considered a wonder tree?
22. Listen again to part of the talk. Then answer the question.
"However, in the 1960s, the United States Food and Drug Administration found sassafras oil to be a potential carcinogen for humans because it caused cancer in rats. Since that time, sassafras has been banned for human consumption. No one really knows just how harmful it is to human beings, but some studies show that one cup of strong sassafras tea contains more than four times the amount of the volatile oil safrole that is hazardous to humans if consumed on a regular basis."
What does the speaker imply about sassafras?

TEST 1, Track 6

Questions 23 through 28. Listen to part of a discussion in a philosophy class. The class is studying Plato.

M1: Plato believed the only true reality consists of ideas. Thus, we often refer to his philosophy as "idealism." He didn't think people could create ideas; rather, we discovered them. For instance, the mathematical concept of two plus two equals four—this is an idea that's always existed. It's always been true that two plus two equals four—even before people discovered it. Plato's ideas were—and still are—valuable because they've stimulated a great deal of thinking about the meaning and purpose of humanity, society, and education. The ideas of Plato survive in our thinking today, and survive in our educational system. Another important principle—yes?

W: Excuse me, Dr. MacDonald, but could you … like … uh … say more about how Plato's ideas are in education today?

M1: Sure. Plato believed the state should take an active role in education—most governments today agree—and the state should create a curriculum that leads students from thinking about concrete information toward thinking about abstract ideas. Higher-level thinking would develop the individual student's character, and thus ultimately benefit the larger society. Plato believed our most important goal was the search for truth. The idealists of today generally agree that a major focus of education should be on the search for knowledge, but some feel it's not truth per se that's important as much as the search for truth. Idealists favor learning that's holistic over learning that's specialized. For instance, idealists consider subjects like chemistry and physics useful, but they're of real value only when they help us to see the whole picture of our universe. Idealists aren't concerned with turning out graduates with specific technical skills as much as giving students a broad understanding of the world they live in.

W: But isn't that kind of impractical? I mean, most of us go to college because we want knowledge about certain subjects, not the whole universe.

M1: Idealists believe that education should teach students to think—not what to think, but how to think. Thinking is the skill that develops character. If you develop the ability to think, you—and all of humanity—will become more noble and rational.

M2: The philosophy of idealism seems kind of conservative.

M1: Idealism is often criticized as being a conservative philosophy because so much of its emphasis is on character development and preserving traditions. Idealists care about ultimate truths, so their notion of education is largely a matter of passing on knowledge.

M2: But what's the ultimate truth? Who gets to decide what's true?

M1: Who gets to decide what's true? Excellent question … and it's questions like this that have led to a weakening of idealism today. Developments in science and technology have changed what we've thought of as true. Our contemporary emphasis on relevance, usefulness, and innovation—as opposed to lasting values—all of these trends have cut idealism down to size.

W: I think all the concern with character development is kind of old-fashioned. Doesn't that make people … uh … doesn't it just lead to conformity?

M1: Good point. Critics of idealism would agree with you that "character development" comes at the expense of creativity, and that too much emphasis on traditional values can be harmful—if it makes students stop questioning what they're being taught.

23. What aspect of Plato's philosophy does the professor mainly discuss?
24. Why does the professor mention the mathematical concept of $2 + 2 = 4$?
25. What do idealists believe about higher-level thinking?
26. Listen again to part of the discussion. Then answer the question.
"Idealists aren't concerned with turning out graduates with specific technical skills as much as giving students a broad understanding of the world they live in."
"But isn't that kind of impractical? I mean, most of us go to college because we want knowledge about certain subjects, not the whole universe. "
What is the woman's attitude toward the idealist view of education?
27. Listen again to part of the discussion. Then answer the question.
"Who gets to decide what's true? Excellent question … and it's questions like this that have led to a weakening of idealism today. Developments in science and technology have changed what we've thought of as true. Our contemporary emphasis on relevance, usefulness, and innovation—as opposed to lasting values—all of these trends have cut idealism down to size."
What does the professor mean when he says this:
"…all of these trends have cut idealism down to size."
28. According to the professor, what do critics say about idealism?

TEST 1, Track 7

Questions 29 through 34. Listen to part of a lecture in a physics class. The professor is discussing energy and work.

In physics, energy is defined as the ability to do work. And in physics, work doesn't refer to what you do at your job. In physics, work means moving an object when there is some resistance to its movement. Every time we lift an object, push it, pull it, or carry it, we are doing work.

Two things are necessary for work to occur. First, force—or energy—must be applied to the object. If no energy is used, no work has been done. Second, the object must be moved a distance. If the object is pushed or pulled but it doesn't move, no work has been done.

When we move an object, there's always some resistance, or opposition to movement. Resistance is a force that tends to oppose or slow down movement. Whenever an object meets resistance, more energy is needed to do the work. A good example is what happens when a farmer's plow moves through the soil. The plow encounters resistance if it gets too deep into the soil, or if rocks and roots in the soil make the soil hard to turn. When this happens, the tractor's engine has to work harder. The engine strains under the load and uses more fuel.

Each time we do work, we use energy. If our muscles do the work, energy in the form of food is required. If a machine does the work, energy in the form of oil, gas, coal, electricity, or some other source is required. Without energy, no work can be done.

Energy comes in several different forms. It can take the form of heat, light, motion, electricity, chemical energy, nuclear energy, and so on. Energy can change forms, but it cannot be created or destroyed. Energy is always conserved—that is a law of nature. This law is known as the law of conservation of energy, or the first law of thermodynamics. The law states that energy can be converted from any form to any other form, but no matter what form it takes, it's still energy, and none of the energy disappears when it changes form.

Machines do work by converting one form of energy to another. For example, a car converts the chemical energy in gasoline to kinetic energy—to motion. A stove converts electrical energy or chemical energy into heat energy that cooks our food. The law of conservation of energy tells us that a machine needs to have a source of energy. And a machine can't supply more power than it gets from its energy source. When the fuel runs out, the machine stops. The same rule applies to living organisms: if the organism doesn't have food, it dies.

The law of conservation of energy tells us that the energy of any system—whether the system is a machine, a living organism, or an ecosystem—that the energy must balance out in the end. The amount of energy in the system is conserved, even though the energy changes forms.

The earth as a whole is a complex system that receives almost all its energy from the sun in the form of light. Some of the solar energy converts to heat, which warms the earth. Some of it evaporates water, forms clouds, and produces rain. Some energy is captured by plants, and is turned into chemical energy during photosynthesis. The first law of thermodynamics—conservation of energy—says the earth must end up with the same amount of energy it started out with. The energy changes forms, but no energy is lost or gained.

29. How does the field of physics define "work"?
30. Listen again to part of the lecture. Then answer the question.
    "Whenever an object meets resistance, more energy is needed to do the work. A good example is what happens when a farmer's plow moves through the soil. The plow encounters resistance if it gets too deep into the soil, or if rocks and roots in the soil make the soil hard to turn. When this happens, the tractor's engine has to work harder. The engine strains under the load and uses more fuel."
    Why does the professor talk about a plow?
31. Based on the information in the lecture, indicate whether each statement below reflects the first law of thermodynamics.
32. Which two sentences illustrate the conversion of energy from one form to another?
33. Listen again to part of the lecture. Then answer the question.
    "The law of conservation of energy tells us that a machine needs to have a source of energy. And a machine can't supply more power than it gets from its energy source. When the fuel runs out, the machine stops. The same rule applies to living organisms: if the organism doesn't have food, it dies."
    Why does the professor say this:
    "The same rule applies to living organisms: if the organism doesn't have food, it dies."
34. What can be inferred about the energy in the earth as a whole system?

TEST 1, Track 8

SPEAKING SECTION DIRECTIONS (p. 466)

The Speaking section measures your ability to speak in English about a variety of topics. There are six questions in this section. Record your response to each question on a cassette.

Questions 1 and 2 are independent speaking tasks in which you will speak about familiar topics. Your responses will be scored on your ability to speak clearly and coherently about the topics.

Questions 3 and 4 are integrated tasks in which you will read a passage, listen to a conversation or lecture, and then speak in response to a question about what you have read and heard. You will need to combine relevant information from the two sources to answer the question completely. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

Questions 5 and 6 are integrated tasks in which you will listen to part of a conversation or lecture, and then speak in response to a question about what you have heard. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You will hear each conversation and lecture only one time. You may take notes while you listen. You may use your notes to help you answer the questions.

TEST 1, Track 9

What game do you enjoy playing? Describe the game, and explain why you like to play it. Include details and examples in your explanation.

TEST 1, Track 10

Some people drive their own car to school or work. Others ride a bus, train, or other form of public transportation. Which do you think is better and why? Include details and examples in your explanation.

TEST 1, Track 11

Now listen to a student as he discusses online courses with his academic adviser.

M: I want to take astronomy next quarter, and I was thinking of registering for the online course.
W: Have you ever taken an online course before?
M: No. But I have a computer, and it seems fairly easy to take a course this way.
W: Let me just point out a couple of things. First, you have to be able to learn on your own, mainly by reading. So you have to be self–motivated. There are a few online lectures, but mainly you have to read the information on a computer. You also have to keep up with a schedule, just as in any other class. So unless you're self–motivated, online courses are generally not a good idea. In fact, there's a fairly high dropout rate for online courses.
M: Hmmm. I didn't know that. It seems like it would be so easy because you don't have to be in class at a specific time.
W: Believe it or not, the main reason that students drop out is they miss going to class. They miss the face–to–face contact with the professor. So, if interacting with the professor and other students is important to you, then you should consider taking a regular classroom course.

The adviser expresses her opinion about online courses. State her opinion and explain the reasons she gives for holding that opinion.

TEST 1, Track 12

Now listen to part of a talk in a business class.

When you think about it, corporations have all the familiar elements of other types of culture. Corporations have values, norms, rituals, symbols, and so forth. As in any society, these things define the whole group.

Corporate culture gives meaning to the daily activities of the company. The company logo and colors are like the flag of any nation. In a lot of corporations, your rank is signified by the suit you wear and the size and location of your office. Corporations have rituals, like the employee picnic or the executive fishing trip. These rituals bring people together to celebrate corporate unity. There are also corporate texts, such as the sayings of the founder or president.

Generally speaking, well–established companies have traditional corporate cultures. For example, new employees may learn the company song or may wear the corporate uniform of dark suit, white shirt, and striped tie. Business hours are standard and office conduct is formal.

In contrast, many new technology firms have a very informal culture. Employees go to work in blue jeans, T–shirts, and sneakers. They may come and go at will; they may bring their pets to work. In informal cultures like this, there are often no fixed traditions to follow.

Explain how corporations are similar to any other culture, and explain how corporate culture varies in different companies.

TEST 1, Track 13

Now listen to a conversation between two students.

W: Hi, Jim. How's it going this quarter?
M: Well, to be honest, not very well. I just got my geology test back and I'm afraid my grade was not good. I'm disappointed, too, because I like the professor and the class.
W: Oh. Well, would it help if you got a tutor?
M: I don't know. The main problem is I don't have enough time to study. My boss has asked me to work more hours at my job, and that leaves me less time for geology.
W: Oh, I see. Well, what if you quit your job?
M: I can't afford to do that.
W: But maybe you could look for a different job, here on campus. The campus jobs are posted in the Career Center.
M: Well, maybe … if I could find a job that pays as well as the one I have. I just wish I had more time to study. I need to pass my geology course.
W: You know … you could drop the class now and take it again next quarter. You already have the textbook, and you could read ahead on your own.
M: Well, I need to do something fast because I can't fail the course.

Describe the man's problem and the suggestions the woman makes about how to solve it. What do you think the man should do, and why?

TEST 1, Track 14

Now listen to part of a lecture in a marine biology class.

Ocean scientists study several physical properties of water, including transparency—or water clarity—and color. Clear water indicates an absence of particles suspended in the water that would affect the ability of light to pass through it. Water clarity determines how much plant growth there may be in an ocean region. Plant growth usually depends on how deep the sunlight will reach: the clearer the water, the deeper the light will penetrate.

The color of seawater varies a lot from place to place. For example, the water of the Gulf Stream in the Atlantic Ocean is a deep indigo blue, while a similar current in the Pacific off Japan is called the Black Stream because of the very dark color of its water. Along many coasts, the water is green. The green color is a mixture of blue—due to the scattering of sunlight in the water—and the soluble yellow pigment associated with phytoplankton, the floating plant life.

In some places, the water is brown or brownish red. Brown or brownish red water gets its color from large quantities of certain types of microscopic brown algae. Brown algae are common along temperate coasts, where the water is cool. Their brown color comes from the brown pigments they contain. A bucket of water scooped from the surface of the sea may contain millions of microscopic brown algae.

In tropical or subtropical regions, various shades of blue are common. The blue color results from the scattering of sunlight by tiny particles suspended in the water, or by molecules of the water itself. Blue light has a short wave length, and because of this, blue light is more readily

distributed than light of longer wavelengths. Therefore, the ocean appears blue for the same reason that the sky does.

Using points and examples from the lecture, explain why some ocean water is clear and why some water is a certain color.

TEST 1, Track 15

WRITING SECTION DIRECTIONS (p. 471)

The Writing section measures your ability to use writing to communicate in an academic environment. There are two writing questions.

Question 1 is an integrated writing task. You will read a passage, listen to a lecture, and then answer a question based on what you have read and heard. You have 20 minutes to plan and write your response.

Question 2 is an independent writing task. You will answer a question based on your own knowledge and experience. You have 30 minutes to plan and write your response.

TEST 1, Track 16

Now listen to a professor's response to the reading.

Why do people travel to distant lands? Centuries ago, their reasons were primarily political or economic, for conquest or colonization. The idea of traveling for personal enrichment is fairly modern, only a few centuries old, and traveling just for adventure is even newer.

It's interesting that the reading mentions Ernest Hemingway's big game hunts in Africa as an example of traveling for adventure. Actually, Hemingway illustrates the conquest ideal in tourism. Hemingway was an adventurer who traveled to so-called "savage" lands to hunt wild animals and bring back trophies. Of course, only a few people at the time could afford his style of travel—with servants to make the trip more comfortable—yet Hemingway was very influential, and his writings were very popular. You can still see his influence in tourism today, especially in sports that involve the control and conquest of nature, like hunting and fishing.

The tourists of today take trips purely for pleasure, recreation, adventure, and, of course, personal growth. More travelers seek out the most distant places as well as the most unusual cultures. We can see this in ethnic tourism, a new kind of cultural tourism that includes visits to traditional villages and people's homes to observe social customs, and see native arts and crafts, and watch local ceremonies, and so on. Ethnic tourism helps preserve aboriginal cultures that might otherwise be endangered by assimilation into the larger society. In fact, ethnic tourism allows us to enjoy folk dances, songs, costumes, and ceremonies that might otherwise be lost.

Another growing area of tourism is environmental tourism, which is kind of related to ethnic tourism. Environmental tourism is traveling to pristine wilderness areas where few people have gone before. The goal is to observe and learn about nature. The African safaris of today, for example, are for the purpose of observing and photographing wildlife—not killing it.

Summarize the points made in the lecture, and explain how they are similar to or different from points made in the reading.

TEST 2

TEST 2, Track 1

LISTENING SECTION DIRECTIONS (p. 488)

The Listening section measures your ability to understand conversations and lectures in English. You will hear each conversation and lecture only one time. After each conversation or lecture, you will hear some questions about it. Answer all questions based on what the speakers state or imply.

You may take notes while you listen. You may use your notes to help you answer the questions.

Most questions have four possible answers. In some questions, you will see this icon: 🎧. This means that you will hear, but not see, part of the question.

Some questions have special directions, which appear in a gray box. Most questions are worth one point. If a question is worth more than one point, special directions will indicate how many points you can receive.

You have approximately 40 minutes to complete the Listening section. This includes the time for listening to the conversations and lectures and for answering the questions.

To make this practice more like the real test, cover the questions and answers during each conversation and lecture. When you hear the first question, uncover the questions and answers.

TEST 2, Track 2

Questions 1 through 5. Listen to part of a conversation between two students.

M: Oh, hi! It's good to see you. What's happening?
W: I'm busy with my classes. The quarter's going by really quickly. How about you? What have you been up to?
M: Busy with school and work. Hey, what are you taking spring quarter?
W: Literature, sociology … botany, and … uh … I'm hoping to do something in the arts, maybe some sort of work experience or internship.
M: No kidding! I didn't know you were artistic. What do you have in mind?
W: Well, there's this theater group I just found out about in Chester. I went to a couple of their plays. They're an interesting company. They perform a lot of new works, and they also do older plays that aren't very well known, and … well … I'm really impressed and would love to work with them in some way.
M: No kidding! I didn't know you were into theater. Do you act?
W: Not really … I took drama in high school, but I was awful on stage. No … it's not acting that interests me as much as … all the other stuff.
M: Like what? Directing? Lighting?
W: All of it, actually. This theater I told you about—they have the best sets! I'd like to build sets. Or make costumes, find props—I don't know, even work in the office. It's the whole atmosphere of theater that I find exciting.

M: It sounds like you need to be a theater intern.
W: But, as far as that goes … my problem is I don't know anything about setting it up.
M: What, the internship?
W: Yeah.
M: Do you know anyone who works there?
W: No, I only found out about it 'cause I went to a couple of plays.
M: Better go see your adviser about this. Doesn't the advising department post a list of internships that are available?
W: Yeah, there's a list. I already checked it, and there was nothing in theater. But I'll talk to Sherry, of course. She's my adviser.
M: You know what you could do? When I had to do an observation last year for my psychology class—we had to observe a work group for two weeks—what I did—how I got started was, I picked out a couple of law firms and then just sent formal letters of introduction. I told them I was a student, and had to do a report for one of my classes, and asked if I could meet with them to arrange an observation in their workplace.
W: Oh … really? And what happened?
M: I said I'd call them, and the first firm I called said I could do it there.
W: Wow! You make it sound so easy. I wonder if that'd work with the theater.
M: It's worth a try, isn't it?
W: It's worth a try. Hey, I'm glad I ran into you!

1. What are the students mainly discussing?
2. What does the woman like about theater?
3. What is the woman's opinion of her own acting ability?
4. Why does the man say this:
   "Like what? Directing? Lighting?"
5. What does the man suggest the woman do?

TEST 2, Track 3

Questions 6 through 10. Listen to a conversation between a student and a professor.

M: Hi, Professor Reynolds.
W: Oh, hi, Jeff. I just read your note. You wanted to talk about something?
M: Uh, yeah, just an idea I have. I've been thinking—um, I was reading about what's been going on with those houses on Fox Point.
W: You mean the slide?
M: Yeah, that's right. The paper said a few days ago there was only one house that was affected, but this morning there was another article saying there were lots more houses involved than they previously thought, maybe as many as fifteen or twenty homes. A couple of houses have big cracks in the foundation.
W: I read the article too. It seems like nothing but bad news for the homeowners.
M: Yeah. My old boss lives out there on Fox Point. I don't know if his house is one that's affected. Anyway … I was … um … I was sort of thinking I could write a paper on it. I remember how in your Intro to Geology course we studied gravity movements. I thought maybe … um … the slide on Fox Point was a case of subsidence … um … when the earth sinks 'cause there's a weakening of support. I was thinking this might be an example of settlement.
W: Settlement happens from the more or less gradual compacting of underlying material—for example, when wet soil at the surface dries and shrinks, and creates a depression. It can also happen when frozen ground melts.
M: In class you talked about the Leaning Tower of Pisa.
W: Yes. The settlement that's caused the Tower of Pisa to lean is due to the failure of a clay layer beneath it. Engineers have been working on it for decades, but still haven't been able to stop the process.
M: There was another kind of settlement you talked about … um … when groundwater's removed.
W: Yes, that's what happened in the San Joaquin Valley in California. Part of the valley floor sank 30 feet because of the removal of groundwater for irrigation. But the problem on Fox Point may not be subsidence at all. This probably has more to do with the slope, and with the amount of rain we've been having lately.
M: So … it's just a regular old mudslide, not like the Leaning Tower?
W: It's probably not like the Leaning Tower.
M: The article did say the houses were on a slope, but it's only slight, it's not steep at all.
W: Mudslides are most common on intermediate slopes—27 to 45 degrees—because these slopes are gentle enough for sediment to accumulate and steep enough for sliding. One suggestion I have is to take a look at the county's Web site. There's a page on the geology of the region. This area has a history of slides. There was one on Johnson Island about ten, twelve years ago.
M: Oh, really? I didn't know that. Maybe there's a connection.
W: Possibly. It's an idea to work on.
M: Well, this gives me a place to start. Thanks, Professor Reynolds. I appreciate your input.

6. Why does the student go to see the professor?
7. What topic is the man mainly interested in?
8. Why does the student say this:
   "In class you talked about the Leaning Tower of Pisa."
9. According to the professor, where are mudslides most common?
10. What will the man probably include in his research?

TEST 2, Track 4

Questions 11 through 16. Listen to part of a discussion in a botany class. The class is talking about flowers.

W1: In a perfect, idealized flower, its four organs are arranged in four whorls, all attached to the receptacle at the end of the stem. Before we go on, let's quickly go over the four parts of the flower. First, let's start from the outside and work in. Which organ is on the outside, closest to the stem?
M: The sepal. That's the part that kind of looks like a leaf 'cause it's usually green. The sepal protects the flower bud before it opens up.
W1: Right. Then what comes next?
W2: The petals, the colorful part of the flower. It's the petals that make the flower attractive to insects and birds … and people, too.
W1: Right. And inside the petal layers we have …?
M: The flower's reproductive parts—the stamens and carpels.

W1: That's right. So we have the four parts of a flower: sepals, petals, stamens, and carpels. Now, during the millions of years in the history of flowering plants, numerous variations evolved. In certain flowers, one or more of the four basic floral organs—sepals, petals, stamens, and carpels—have been eliminated. Plant biologists distinguish between complete flowers—those with all four organs—and incomplete flowers—those lacking one or more of the four floral parts. For example, most grasses have incomplete flowers that lack petals.
There are many variations in the size, shape, and color of flowers. One important element in plant classification is the arrangement of flowers on their stalks. The large composite family, for example, which includes asters, daisies, and sunflowers, have flower heads that form a central disk. What appears to be a single flower is actually a collection of hundreds of flowers. The central disk consists of tiny, complete flowers. And what appear to be petals surrounding the central disk are actually imperfect flowers called ray flowers.
M: I'm not sure I got that. Could you say that again?
W1: Sure. The flower head—the center part of the plant—actually consists of many tiny, tightly packed complete flowers that stand upright on a flat disk. The whole arrangement looks like a single, symmetrical flower, but it's actually a collection of hundreds of separate flowers. The petals—what look like petals—are actually larger flowers called rays that extend from the rim of the disk. Does that help?
M: Uh, yeah, I guess so. What you're saying is, a single sunflower is really hundreds of flowers put together.
W1: That's right. This will make more sense in the lab this afternoon.
So … in the composite family, there are about 19,000 different species worldwide. Many are grown as ornamentals—cosmos, zinnia, dahlia, marigold, and aster. Probably the most-recognized composite flower is the English daisy. The daisy was introduced from Europe and now is a wildflower found on lawns, in fields, and at roadsides throughout North America. The name of the daisy has an interesting origin. The word "daisy" means "day's eye" and comes from an older Anglo-Saxon word. The English daisy folds up its rays at night and unfolds them again at dawn—the "eye of the day" or "day's eye." Several cultivated varieties of English daisy are popular as edging plants or in rock gardens. The English daisy comes in lots of colors—rose, lavender, pink, and white. It has a long bloom time, from April to September. The plants are compact and attractive, with flower heads up to two inches across. In the lab, we'll be looking at some different varieties of the daisy, and you'll see for yourself why they're so popular.

11. What aspects of flowers does the class mainly discuss?
12. Which part of the flower attracts insects and birds?
13. Listen again to part of the discussion. Then answer the question.
"The whole arrangement looks like a single, symmetrical flower, but it's actually a collection of hundreds of separate flowers. The petals—what look like petals—are actually larger flowers called rays that extend from the rim of the disk. Does that help?"
"Uh, yeah, I guess so. What you're saying is, a single sunflower is really hundreds of flowers put together."
"That's right. This will make more sense in the lab this afternoon."
Why does the professor say this:
"This will make more sense in the lab this afternoon."
14. Select the drawing that is most likely a member of the composite family.
15. Based on the information in the discussion, indicate whether each statement below is true or not true.
16. According to the professor, how did the daisy get its name?

TEST 2, Track 5

Questions 17 through 22. Listen to part of a lecture in an anthropology class.

M: Every human society has developed some interest in activities that could be considered sports. The more complex the culture, the more various the range of sporting behavior. There are certain elements in all human sports that are clues to the common underlying structure of sports. Sports tell us a great deal about the kinds of behavior that our prehistoric ancestors evolved—activities that were basic survival skills. Now, let me ask you—what skills were most important to the survival of our ancestors? Yes, Lynne?
W: The ability to find food?
M: Yeah …. But what skills were necessary to find food?
W: Um … good eyesight?
M: OK. What else?
W: Well, if they were hunters, they also had to be fast runners … and they had to have good eyes and a good arm—I mean a good aim—so they could kill game.
M: Yes! And isn't it interesting that you just used the word "game"? Our prehistoric ancestors were gamers—they hunted game animals to survive. Look at the number of sports that originated in hunting. First, hunting itself. But for some societies, the ancient pattern of killing prey is kept alive in the form of blood sports—these are sports that involve the killing of an animal. Even in places where the killing is no longer a matter of survival, it still survives as a sport. The animals—like ducks or pheasant, certain fish—are often eaten as luxury foods. It's the personal sense of mastery, the sort of delight in the skills of the hunter … these are more important than the food itself. For our prehistoric ancestors, the climax of the hunt was always a group celebration, with songs of praise for the hunters. As hunting sort of became more symbolic, spectators became more important. The ancient Romans brought the hunt to the people by confining it to an arena—the Coliseum. The Coliseum made the hunting field smaller, and this sort of intensified the activity for the entertainment of the spectators. The systematic killing of animals for sport still survives in parts of the world today—think of bullfights and cock fights. But animal sports are only part of the picture. Today, people find human competition more satisfying than competition involving just animals. Take track and field sports. These don't involve animals, but they did originate in hunting. The earliest sports meetings—or meets, as we call them—were probably ritualized competitions of important skills. Think of how many Olympic sports there are that involve aiming, throwing, and running—which are all hunting skills.

The difference is that now the hunting has become totally symbolic. In some sports, there's still a strong symbolic element of the kill. Wrestling, boxing, fencing, martial arts—all these are examples of ritualized fighting. Even tennis is kind of a fight—of course, an abstract one. There are lots of direct references to fighting in the language of sports, too. For example, what do soccer and chess players do? They "attack" or "defend."

Today, even the most violent fighting sports have strict rules that are designed to prevent serious injury. There's also some kind of referee to make sure that the rules are observed. In sports, the objective is victory, not the actual destruction of your opponent. Another objective is to impress and entertain the spectators—not to shock or offend them. Because sports contain such a powerful negative element, most have an ideal of acceptable behavior—something we call "sportsmanship." There's also a universal convention in sports where the winner honors the defeated opponent—with a handshake, with words of praise, or some token of respect.

17. What is the main idea of the lecture?
18. Listen again to part of the discussion. Then answer the question.
    "Now, let me ask you—what skills were most important to the survival of our ancestors? Yes, Lynne?"
    "The ability to find food?"
    "Yeah .... But what skills were necessary to find food?"
    Why does the professor say this:
    "Yeah .... But what skills were necessary to find food?"
19. According to the professor, why did the ancient Romans build the Coliseum?
20. What point does the professor make about track and field sports?
21. Which sports contain a symbolic element of the kill?
22. What does the professor imply about the negative element of sports?

TEST 2, Track 6

Questions 23 through 28. An epidemiologist has been invited to speak to students in a public health class. Listen to part of the talk.

Epidemiology is the field of medicine that deals with epidemics—outbreaks of disease that affect large numbers of people. As an epidemiologist, I look at factors involved in the distribution and frequency of disease in human populations. For example, what is it about what we do, or what we eat, or what our environment is, that leads one group of people to be more likely—or less likely—to develop a disease than another group of people? It's these factors that we try to identify.

We use statistical analyses, field investigations, and a range of laboratory techniques. We try to determine the cause and distribution of a disease. We also look at how quickly the disease spreads—and by what method—so we can implement measures to control and prevent the disease. Some epidemiologists concentrate on communicable diseases, like tuberculosis and AIDS. Others focus on the growing epidemics in cancer, diabetes, and heart disease.

We gather data in a variety of ways. One way is through what we call descriptive epidemiology, or looking at the trends of diseases over time, as well as ... uh ... trends of diseases in one population relative to another. Statistics are important in descriptive epidemiology, because numbers are a useful way to simplify information.

A second approach is observational epidemiology, where we observe what people do. We take a group of people who have a disease and a group of people who don't have a disease. We look at their patterns of eating or drinking and their medical history. We also take a group of people who've been exposed to something—for example, smoking—and a group of people who haven't, and then observe them over time to see whether they develop a disease or not. In observational epidemiology, we don't interfere in the process. We just observe it.

A third approach is experimental epidemiology, sometimes called an intervention study. Experimental research is the best way to establish cause–and–effect relationships between variables. A typical experiment studies two groups of subjects. One group receives a treatment, and the other group—the control group—does not. Thus, the effectiveness of the treatment can be determined. Experimental research is the only type of research that directly attempts to influence a particular variable—called the treatment variable—as a way to test a hypothesis about cause and effect. Some examples of treatments that can be varied include the amount of iron or potassium in the diet, the amount or type of exercise one engages in per week, and the minutes of sunlight one is exposed to per day.

The Health Research Institute, of which I am the director, is mostly involved in experimental studies—I say mostly because we study treatment and non–treatment groups and then compare the outcomes. However, we do collect and study various types of data in any given year. From these different approaches—descriptive, observational, and experimental—we can judge whether a particular factor causes or prevents the disease that we're looking at.

23. What is the talk mainly about?
24. What factors do epidemiologists study?
25–26. Based on the information in the talk, indicate whether each sentence below describes descriptive, observational, or experimental epidemiology.
27. Why do epidemiologists often study two groups of people?
28. Listen again to part of the talk. Then answer the question.
    "The Health Research Institute, of which I am the director, is mostly involved in experimental studies—I say mostly because we study treatment and non–treatment groups and then compare the outcomes. However, we do collect and study various types of data in any given year. From these different approaches—descriptive, observational, and experimental—we can judge whether a particular factor causes or prevents the disease that we're looking at."
    Why does the speaker talk about her own work?

TEST 2, Track 7

Questions 29 through 34. Listen to part of a talk in a music education class.

Learning to play a musical instrument is one of the best experiences that a young child can have. Learning to play music begins with listening to others play music. A child's first experience with playing an instrument should be by ear, without the distraction of printed music. Playing by ear is the natural beginning for children. The ability to play by ear will help them throughout their lives, and it also enriches the experience of music making. But children should eventually learn to read music. So, when is the right time? And what's the best way for a child to learn how to read music?

A lot of children start playing an instrument at the age of eight or nine. It's best for them to spend a couple of years playing by ear before the teacher introduces notation—printed music. Children should first be able to feel that their instrument is a part of them. Playing by ear is the best way for children to become comfortable with their instrument.

The teacher should introduce notation only when the child is ready. The right time is when the child feels a need for notation. This might be when the child has learned so many pieces it's sort of difficult to remember them all. Then the teacher can present the printed music as a memory aid, so learning to read music has a practical purpose and isn't just a meaningless task.

A good time to teach notation is when a group of children play together. The printed score is a way to help them sort of keep track of who plays what and when. The score will organize their cooperative effort in a way that makes sense to them.

Another good time is when the child wants to play music that's so complex it would be difficult to learn by ear. In this case, learning to read music is a natural step toward playing the music the child wants to play. The teacher should play the score for the child the first time through, and demonstrate how the notes on the page are transformed into music. The child listens as he or she looks at the printed notes. This way, the child can begin to see how the notes represent sound and a printed score becomes a piece of music. As the child listens—and maybe plays along—he or she begins to understand the shape of the new piece.

For students who play a chord–producing instrument—the guitar, for example—a natural first step toward reading music is playing by chord symbols. Chord symbols are found in a lot of different styles of music—like pop and jazz—and at various levels of difficulty. Chord symbols are a simple form of written music—they're kind of a halfway point between playing by ear and reading a standard musical score.

After children can play by ear, and then by chord symbols, the next step is to read standard music notation. Although that's the natural order for children to learn, it doesn't mean that each successive step is better than the one that came before. The three methods of playing music—playing by ear, playing chords, and playing by standard notation—are all valuable in their own way. Some children will always prefer to play by ear. Others will like chord playing and have no desire to learn another method. And still others will find their musical home in the tradition of note reading. It's the job of the music teacher to fit the method to the needs of the students.

29. What is playing by ear?
30. Listen again to part of the talk. Then answer the question.
    "Playing by ear is the natural beginning for children. The ability to play by ear will help them throughout their lives, and it also enriches the experience of music making. But children should eventually learn to read music. So, when is the right time? And what's the best way for a child to learn how to read music?"
    Why does the professor ask this:
    "So, when is the right time? And what's the best way for a child to learn how to read music?"
31. According to the professor, when should children learn to read musical notation?
32. According to the professor, why should a music teacher play the score for a child the first time?
33. According to the professor, what is the natural order for children to learn music?
34. What does the professor imply about the three methods of playing music?

TEST 2, Track 8

SPEAKING SECTION DIRECTIONS (p. 494)

The Speaking section measures your ability to speak in English about a variety of topics. There are six questions in this section. Record your response to each question on a cassette.

Questions 1 and 2 are independent speaking tasks in which you will speak about familiar topics. Your responses will be scored on your ability to speak clearly and coherently about the topics.

Questions 3 and 4 are integrated tasks in which you will read a passage, listen to a conversation or lecture, and then speak in response to a question about what you have read and heard. You will need to combine relevant information from the two sources to answer the question completely. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

Questions 5 and 6 are integrated tasks in which you will listen to part of a conversation or lecture, and then speak in response to a question about what you have heard. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You will hear each conversation and lecture only one time. You may take notes while you listen. You may use your notes to help you answer the questions.

TEST 2, Track 9

Describe a person who has influenced you in an important way. Explain why this person has had an effect on your life. Include details and examples in your explanation.

TEST 2, Track 10

Some people get most of their news from the radio or television. Others read the newspaper. Which source of news do you think is better and why? Include details and examples in your explanation.

TEST 2, Track 11

Now listen to two students as they discuss the attendance policy.

M: It looks like we'll be in the same biology class. I'm going to miss the first day because I won't be back from vacation yet, so I'll ask you for the lecture notes.

W: But you can't miss the first day! Attendance is mandatory on the first day.

M: Oh, I don't agree with that. It will be all right. That policy is unfair anyway.

W: It's not unfair! The instructor has the right to set the attendance policy, and the right to kick you out of class if you don't follow it. The way I look at it, if the instructor has to be there every day, then so should the students. That seems fair to me.

M: Oh, but the students can read and study on their own. It's not important to go to class. The only thing that's important is the examinations.

W: I disagree. I think it's important to participate in class. That's an important part of learning.
M: But you can learn what you need to know by studying on your own!
W: But how do you know you won't miss something important? You can't always understand everything on your own. That's why you need to go to class. And that's why there's an attendance policy.

The woman expresses her opinion about the attendance policy. State her opinion and explain the reasons she gives for holding that opinion.

TEST 2, Track 12

Now listen to part of a lecture on the same topic in a sociology class.

One ethical problem with participant observation is that researchers usually come from social backgrounds very different from those of the people they're studying, so they have to be dishonest about their reason for being there. They may have to lie about who they are. For example, in one study, a researcher wanted to study fast–food workers, so she got a job in a fast–food restaurant. She changed her name and lied about her work history, and pretended not to have a university education. This is where the ethical problem starts.

To complicate matters, the researcher used other people's acceptance of her lies in order to advance her own career. She was pretending to be someone else, a fast–food worker, to write a book about the experience. So she was basically using other people without their knowledge or permission.

One solution to the problem is to be honest about who you really are. However, this might influence the results of the study because people might not act naturally if they know they're being observed. Another acceptable solution is to tell everyone as soon as possible after the project is completed. That's what our fast–food researcher did. At the end of the study, she told the other workers that she was writing a book about them in order to get their approval to tell their stories.

Explain the ethical problem in the participant observation study discussed in the lecture. State what the researcher did to solve the problem, and explain why this was acceptable.

TEST 2, Track 13

Now listen to a conversation between two students.

W: So, are you doing the internship at the bank next semester?
M: Maybe. I'll be doing an internship anyway. My parents want me to take the bank internship because they want me to go into banking. But Dr. Kim has asked me to be her intern. She's doing a study of population growth and wants me to help her. I'd rather work on the population study, but I don't want to disappoint my parents either.
W: Do you want your career to be in banking?
M: At one time I thought I did. But now I'm much more excited about the idea of working with statistics, you know, doing pure research.
W: Then you should do the internship with Dr. Kim on the population study. That way you'll know for sure if pure research is what you want to do with your life.
M: My father won't be happy about that.
W: How do you know? Talk to him. Tell him why the population project excites you. Tell him it's a great opportunity to work with Dr. Kim, and quite an honor for a professor to ask you like this. That might actually please your father. But in the end, you have to do what makes you happy.

Describe the man's problem and the suggestions the woman makes about what he should do. What do you think the man should do, and why?

TEST 2, Track 14

Now listen to part of a talk in a biology class. The professor is discussing competition in bird populations.

Competition is the struggle among birds for resources. Whenever there's a limited supply of a resource—such as food, nest sites, or mates—there'll be competition. Competition can take place between birds of the same species or between birds of different species.

There are a couple of forms of competition: direct and indirect. Direct competition is when a bird actively excludes others from getting resources. A common example is stealing; a bird may simply take food from another. Another example is territories. Especially during the breeding season, birds maintain and defend some sort of territory. They form territories to defend resources like food, or to maintain access to good nest sites, or to attract mates. Some birds compete directly by fighting, for example, when they compete for mates. Others fight over food; you can see this if you watch gulls feeding on the garbage at the local garbage dump.

And the second type of competition is indirect competition, when birds simply use up a resource. When one species eats all the seeds or berries or grubs, this will prevent other species from using that resource. Indirect competition is less open than direct competition, but it can have just as great an influence on populations. For example, a flock of geese grazing in a field will gradually decrease the amount of food there. The larger the flock, the faster the food will be used up, and this reduces the amount of food available to other species.

Competition determines the size of bird populations. As the population of a species increases in a particular area, the likelihood of competition also increases. Eventually, competition may limit the size of the population because there's simply not enough food and nest sites for more birds.

Using points and examples from the talk, explain the two types of competition in bird populations. Then explain how population size and competition are related.

TEST 2, Track 15

WRITING SECTION DIRECTIONS (p. 499)

The Writing section measures your ability to use writing to communicate in an academic environment. There are two writing questions.

Question 1 is an integrated writing task. You will read a passage, listen to a lecture, and then answer a question based on what you have read and heard. You have 20 minutes to plan and write your response.

Question 2 is an independent writing task. You will answer a question based on your own knowledge and experience. You have 30 minutes to plan and write your response.

TEST 2, Track 16

Now listen to part of a lecture in an anthropology class.

Now I'd like to tell you about a famous study that points to some of the more troubling aspects of same–age peer groups. It's known as the Robbers Cave Experiment, and it looked at a group of 22 normal eleven–year–old boys. All of the boys had similar social, economic, and educational backgrounds. The boys were taken to a summer camp in Robbers Cave State Park in Oklahoma.

The study took place in three stages. In the first stage, which lasted one week, the boys were randomly divided into two groups. In this stage, competition was discouraged, and there were joint activities. But the two groups nevertheless began to show signs of feeling competitive. For example, they named themselves the Eagles and the Rattlers, and they began to tease and belittle each other.

In the second stage, a series of contests was set up between the two groups: baseball, tug–of–war, skits, treasure hunts, and even cabin inspections. There were prizes for the winners, like medals and camp knives. After the second day, there was an increase in name–calling and insults between the two groups, to the point that the negative attitudes became very clearly defined.

Then, in the third stage of the study, the two groups were put back together again. They were given important goals to reach together, such as fixing the water tank … so all the boys would have water to drink. This project greatly reduced prejudice in just a few days. By the end of stage three, most of the conflict between the groups had disappeared.

So … what does this experiment tell us? Well, for one thing, dividing boys into two groups can easily lead to prejudice and insults between the groups. Also, when the two rival groups are given a cooperative task, like fixing the water tank, they can put away their differences and get the job done. The experiment shows that, in peer groups, competition comes more naturally than cooperation. And—we have to wonder—without the supervision of adults, would competition, teasing, and negative attitudes get even more extreme?

Summarize the points made by the professor about same–age peer groups, explaining how they cast doubt on points made in the reading.

TEST 3

TEST 3, Track 1

LISTENING SECTION DIRECTIONS (p. 516)

The Listening section measures your ability to understand conversations and lectures in English. You will hear each conversation and lecture only one time. After each conversation or lecture, you will hear some questions about it. Answer all questions based on what the speakers state or imply.

You may take notes while you listen. You may use your notes to help you answer the questions.

Most questions have four possible answers. In some questions, you will see this icon: 🎧. This means that you will hear, but not see, part of the question.

Some questions have special directions, which appear in a gray box. Most questions are worth one point. If a question is worth more than one point, special directions will indicate how many points you can receive.

You have approximately 40 minutes to complete the Listening section. This includes the time for listening to the conversations and lectures and for answering the questions.

To make this practice more like the real test, cover the questions and answers during each conversation and lecture. When you hear the first question, uncover the questions and answers.

TEST 3, Track 2

Questions 1 through 5. Listen to a conversation between a student and a music professor.

M: Hi, Professor Casey. How are you?
W: Fine, thanks, Michael. I heard you got the scholarship for the summer program at Silverwood. Congratulations!
M: Thank you. I mean, thank you very much—I'm sure your recommendation helped me a lot.
W: I was happy to do it. So are you ready for summer?
M: I wish it was next week, but I … uh … still have a lot to do before exams. But I'm looking forward to it. I'll be studying oboe with Peter Stanley—he heads the woodwind ensemble there.
W: I know him. You couldn't ask for a better teacher. That's great. I'm really happy for you.
M: Thanks. I'm looking forward to it. He was on the panel for my interview. I'll be studying oboe with him, and also orchestra—Dr. Fine is the conductor—and I'm hoping to do the French horn, too, and maybe take up the krummhorn—it has such a cool sound. They're supposed to have an early music specialist there, but I forgot her name.
W: The krummhorn!
M: Yeah.
W: That's right. You did tell me of your interest in medieval and Renaissance music. I hope you get a chance to pursue that. There's been a revival of interest there. Well, Michael, it looks like you'll have a full plate this summer.
M: I know. I'm sure I'll be working hard! But it'll be great.

W: So what comes after that? What are your plans for next year? You'll be a sophomore, right?
M: Right. I'll be coming back here, so I'm sure I'll be seeing you. You'll still be teaching theory and composition, right?
W: Of course I will. And I look forward to having you in class.
M: What will you be doing this summer?
W: I'll be teaching Theory I and II, and coaching voice.
M: Uh-huh. You're also in a band, aren't you? I mean, outside of school?
W: Yes, I am—a jazz quintet. We do mostly standards. I play piano and sing. For me, that's fun and relaxation time.
M: My girlfriend said she heard you at the Back Alley.
W: Yes, we play there every Wednesday night. You should come hear us sometime.
M: I'd like that. I'll bring my girlfriend. She says you were really good.
W: Well then, I hope to see you some Wednesday night.
M: I'll be there. Well … I gotta go now. I'm supposed to meet my German teacher in fifteen minutes. And thanks again for the recommendation.
W: It's my pleasure, Michael. You'll make the most of it, I'm certain. Good luck!

1. What topics do the speakers mainly discuss?
2. What does the professor mean when she says this: "I know him. You couldn't ask for a better teacher."
3. Why does the professor say this: "Well, Michael, it looks like you'll have a full plate this summer."
4. What does the professor do for relaxation?
5. What can be inferred from the conversation?

TEST 3, Track 3

Questions 6 through 11. Listen to part of a lecture in a film studies class.

In the first two decades of the twentieth century, cinema established itself as a powerful mass medium. Movies were a popular entertainment for working people, but they were more than just entertainment. Movies were also regarded as high art by the intellectuals of the day. Many people believed that cinema—or film—would be the defining art form of the new century.

Even in its earliest years, film was developing its own style—a style that was distinct from that of the theater. But what do we mean when we speak of film style? To put it simply, style is the texture of a film's images and sounds. It's the filmmaker's systematic use of the techniques of the medium—for example, staging, lighting, performance, camera framing and focus. Editing and sound also contribute to style.

A few filmmakers of the silent era were already developing film style, most notably in the editing technique of cutting. Cutting is when the action is broken up into separate shots, or pieces of film, and then the shots are recombined to tell the story in a coherent way. Before cutting, the action in films was like it was in the theater. The action took place far away from us, and it was continuous—it wasn't interrupted by any closer views of the actors.

Early film critics didn't like films that looked too much like theater. Theater was a well recognized art form with its own traditions and methods. However, film was something new, and well, it was an art form that owed its birth to the technology of the moving picture camera. The critics preferred to see stylistic camera work and editing—the techniques that set film apart from theater. A lot of critics felt that editing was the most important film technique. Cutting—the change from shot to shot—was regarded as the key to film artistry.

Another film technique—called cross-cutting—made it possible to tell two stories at the same time. Cross-cutting—it's also called parallel action—it involves showing segments from two different sequences, moving back and forth from one to the other so the two stories appear to be taking place at the same time. Cross-cutting was used in the 1903 film The Great Train Robbery. The film shows bandits escaping from the scene of their crime, and then it cross-cuts to a scene where the townspeople are dancing at a party, unaware the robbery has taken place. The audience easily understands that the two scenes are going on at the same time.

The person who usually receives the credit for inventing most film techniques is D.W. Griffith. While Griffith didn't invent everything about film—actually he defined and redefined the innovations of other filmmakers—he created movies that critics and audiences recognized as a unique narrative form. This is because he perfected the elements of film "grammar" and the art of the story film.

Instead of having one camera shoot a scene from one position, D.W. Griffith filmed each scene from many angles, and then he pieced together the sequences in the editing room. He used editing to heighten and control the dramatic impact of a scene. He introduced analytical editing, that is, breaking down a scene into shots that show closer views of people's faces or gestures. These closely framed shots are known as close-ups. The close-up conveys a character's emotions through subtle changes in the eyes, mouth, and brow. After D.W. Griffith, the close-up became a standard tool in the language of film.

6. What is the lecture mainly about?
7. Which of the following contribute to the style of a film?
8. According to the professor, why did early film critics dislike films that resembled theater?
9. Why does the professor discuss cross-cutting?
10. Listen again to part of the lecture. Then answer the question.
    "The person who usually receives the credit for inventing most film techniques is D.W. Griffith. While Griffith didn't invent everything about film—actually he defined and redefined the innovations of other filmmakers—he created movies that critics and audiences recognized as a unique narrative form. This is because he perfected the elements of film 'grammar' and the art of the story film."
    What does the professor mean when he says this:
    "This is because he perfected the elements of film 'grammar' and the art of the story film."
11. Which camera shot would probably best show that a character is frightened?

TEST 3, Track 4

Questions 12 through 17. Listen to part of a talk in a biology class.

M: Until recently, we knew almost nothing about how important bees are in maintaining natural diversity. Now we know more about them. We know, for example, that honeybees are the dominant pollinators because they play a role in pollinating four out of five food crops in North America. We also know that honeybees—along with the other insects, bats, and birds that transfer pollen between flowers—all

together they contribute more than ten billion dollars a year to fruit and seed production on North American farms. Pollination is one of nature's services to farmers. So think about this: if you eliminated the pollinators, it would take the food right out of our mouths. We biologists never imagined we'd see the day when wild plants or crops suffered from pollinator scarcity. But, unfortunately, that day has come. In fact, farmers in Mexico and the U.S. are suffering the worst pollinator crisis in history. So … what happened? Any ideas? Alicia?

W: Is it … um … because of natural enemies? I read something about a kind of parasite that's killed lots of bees.

M: It's true. An outbreak of parasitic mites has caused a steep decline in North American populations of honeybees. But parasites aren't the only factor.

W: What about the pesticides used on farms? All those chemicals must have an effect.

M: Most definitely, yes. Pesticides are a major factor. Both wild and domesticated bees are in serious trouble because of pesticides. In California, farm chemicals are killing around ten percent of all the honeybee colonies. Agriculture in general is part of the problem. Think about this for a minute: the North American continent is a vast collection of "nectar corridors" made up of flowering plants. These corridors stretch for thousands of miles, from Mexico to as far north as Alaska. And every year, there's an array of migratory pollinators flying north and south with the seasons, following the flowers. The migratory corridors—the flyways—are like … uh … something like a path of stepping–stones for the pollinators, with each "stone" being a collection of flowering plants. But our system of large–scale agriculture has interfered. During the past fifty years, millions of acres of desert in western Mexico and the southwestern United States have been turned into chemically intensive farms, planted with exotic grasses, creating huge stretches of flyway that are devoid of nectar–producing plants for migratory pollinators. What we have now are huge gaps between the stepping–stones—patches of plants here and there. A couple of migratory pollinators are worth noting. One is the lesser long–nosed bat, and another is the most famous pollinator—what is our most famous pollinator? Or I should say our most beautiful pollinator.

W: Oh, I know. It's the monarch butterfly!

M: The monarch butterfly—yes. Millions of monarchs from all over the U.S. and southern Canada fly south every year in late summer. The monarch is the only butterfly that returns to a specific site year after year. Unfortunately, the herbicides used on the milkweed in the Great Plains are taking a toll on monarchs, and fewer of them are reaching their winter grounds in Mexico. Another important pollinator is the long–nosed bat. These amazing animals feed on cactus flowers. What they do is, they lap up the nectar at the bottom of the flower, and then when the bat flies off to another cactus, the pollen stuck to its head is transferred to that plant's flower. But the long–nosed bat is having a tough time, too. Some desert ranchers mistake them for vampire bats, and they've tried to poison them, or dynamite the caves where they roost.

12. What is the talk mainly about?
13. According to the professor, what factors have affected pollinator populations?
14. Listen again to part of the talk. Then answer the question.
"But our system of large–scale agriculture has interfered. During the past fifty years, millions of acres of desert in western Mexico and the southwestern United States have been turned into chemically intensive farms, planted with exotic grasses, creating huge stretches of flyway that are devoid of nectar–producing plants for migratory pollinators. What we have now are huge gaps between the stepping–stones—patches of plants here and there."
Why does the professor say this:
"What we have now are huge gaps between the stepping–stones—patches of plants here and there."
15. Listen again to part of the talk. Then answer the question.
"Millions of monarchs from all over the U.S. and southern Canada fly south every year in late summer. The monarch is the only butterfly that returns to a specific site year after year. Unfortunately, the herbicides used on the milkweed in the Great Plains are taking a toll on monarchs, and fewer of them are reaching their winter grounds in Mexico."
What can be inferred about monarch butterflies?

16–17. Based on the information in the talk, indicate whether each sentence below describes the honeybee, the monarch butterfly, or the long–nosed bat.

TEST 3, Track 5

Questions 18 through 23. A cultural historian has been invited to speak to an urban studies class. Listen to part of the lecture.

The agricultural revolution of ten thousand years ago started the great shift from rural to urban living. As human settlements evolved from simple groups of huts to larger villages, and then to towns and cities, their basic pattern changed.

The early rural villages grew naturally—sort of organically—as if they were plants or bushes, and buildings were clustered near water sources, and around village gardens, with trees for shade and pastures for animals.

A lot of us yearn to escape to these simpler, more romantic settlements of the past. But there are probably more of us who have a powerful urge to explore new ideas and to build bigger and better structures. We now have super–settlements called cities. Our city planners and architects have converted the organic pattern of the village into a geometrically perfect grid. Our natural habitat has been transformed into an expanse of hard, straight surfaces, with stone and metal and concrete and glass.

Of course, the city is still a wonderful place for stimulation, for opportunity, and for cultural interaction. In fact, you could say the city is our most spectacular creation. And, believe it or not, it still has elements of the rural past.

In the average North American city, about one–third of the surface is given to streets and buildings. The rest is covered by trees and grass—foresters call it the "urban forest"—meaning all the trees in city parks, the trees planted along streets and highways, and the trees in people's yards. The extent of this forest is sort of amazing—two–thirds of our urban space.

The concept of a tree–lined village green has a long history, but one of North America's first public parks—that was sort of created as a unified project—was Central Park in New York City. Central Park was designed by landscape architects Olmsted and Vaux in the late nineteenth century. They took their inspiration from the gardens of European estates and the

romantic landscape paintings from that period.

Central Park was set in a rectangular site covering over 800 acres in the middle of Manhattan Island. By the nineteenth century, the original forest was long gone. The area had been used as a common pasture for farm animals, but eventually it deteriorated into a kind of urban wasteland, dotted with garbage dumps.

Olmsted and Vaux transformed this wasteland into something like its original appearance, with rolling hills, grassy meadows, and woody thickets with thousands of trees. The result is sort of an oasis in the middle of steel and stone. Central Park has been called "the city's lung" because of its purifying effect on the air, not to mention its effect on the human psyche. It remains one of the best examples of what we can do with the open spaces of our cities.

When you look at how far we've come as humans, when you consider that we've developed something called civilization, you come to realize that the finest evidence of our civilization is the city. The city is a symbol of experimentation and creation, a place where we can come together for work and entertainment, for art and culture, for wonder and opportunity. And, like the rural villages of the past, the city is where we come together to share cultural experiences with other humans—indeed, to define what it is to be human.

18. What topics does the speaker discuss?
19. How did early rural villages differ from the cities of today?
20. What is the "urban forest"?
21. Why does the speaker talk about New York City?
22. Listen again to part of the lecture. Then answer the question.
    "Olmsted and Vaux transformed this wasteland into something like its original appearance, with rolling hills, grassy meadows, and woody thickets with thousands of trees. The result is sort of an oasis in the middle of steel and stone. Central Park has been called 'the city's lung' because of its purifying effect on the air, not to mention its effect on the human psyche. It remains one of the best examples of what we can do with the open spaces of our cities."
    What does the speaker imply about New York's Central Park?
23. What is the speaker's opinion of the city?

TEST 3, Track 6

Questions 24 through 28. Listen to a discussion between a student and her tutor.

W: My first test in computer science is on Monday, and I'm sure there'll be a question about memory. So, can we go over memory again?

M: Sure. Just remember the term "memory" is used a bit loosely. It describes an important element inside the system unit—the part of your computer where information is stored. Technically, memory can be either of two things: RAM or ROM.

W: RAM and ROM—two kinds of memory. I need to be able to explain them. Now, what's the difference between RAM and ROM?

M: RAM—or random-access memory—stores the programs and data you're using in your current work session. When you turn off the computer, the information in RAM is lost. ROM—read-only memory—stores the information your computer needs to perform basic functions and run programs that are built into your computer … like the program to start up the computer. ROM is permanent memory.

W: OK. You said RAM stores the programs and the data. OK, then what does the hard disk store? I guess I don't understand the difference between the memory and the disk storage.

M: That's a really good question. I'll answer it with an analogy. Imagine you're at the library, doing research for a new product your company wants to make. You've found a cabinet of one hundred file folders with all the information you need. You also have five sheets of instructions from your boss on how to use the information. So, what do you do? You sit down at a table, open several folders, and lay out only the instruction sheet you need for this part of the research. After all, the library table is only so big. When you finish gathering data from the first set of folders, you put them back and get another bunch. Similarly, when you complete the first page of your boss's instructions, you put that page back in your briefcase and pull out another page. Now, which part of your computer's memory is sort of like the library table?

W: RAM?

M: That's right. RAM. Why is that?

W: Because RAM stores only the program and data I need for this part of my work. RAM is sort of my work area—the tabletop—it's what I use when I work with files in a program.

M: That's right. And what are the one hundred file folders?

W: I get it now. The file folders are the disk storage. In a program, when I ask for another file, the computer gets it from the disk—the file cabinet—and loads it into RAM. What I mean is, it sort of puts the file on my work table.

M: That's right! And by keeping in RAM only the files needed for your current work session, you can work much faster and more efficiently. When you're finished, before you leave the library, you clear the table and return all the folders to the cabinet. It's exactly like what the computer does. When you finish your work session on the computer, all the files are returned to disk storage.

24. What is the purpose of the discussion?
25. Where does the computer store information to run programs that are built in?
26. Why does the tutor describe doing research at the library?
27. In the tutor's analogy, what does the library table represent?
28. The tutor briefly describes what happens during a work session on the computer. Indicate whether each sentence below is a step in the process.

TEST 3, Track 7

Questions 29 through 34. Listen to part of a lecture in a United States history class.

The battle at Antietam Creek in 1862 was the bloodiest twenty-four hours of the Civil War. Nearly 8,000 men lost their lives and another 15,000 were severely wounded. No single day in American history has been as tragic. Antietam was memorable in another way, too—it saw the advent of the war photographer.

The best known pictorial records of the Civil War are the

photographs commissioned by Mathew Brady, a leading portrait photographer of the time. Brady owned studios in New York and in Washington, and was known for his portraits of political leaders and celebrities. At the outbreak of the Civil War, he turned his attention to the conflict. He wanted to document the war on a grand scale, so he hired twenty photographers and sent them into the field with the troops. The battlefield carried dangers and financial risks, but Brady was persistent.

Brady himself did not actually shoot many of the photographs that bore his name. His company of photographers took the vast majority of the pictures—images of camp life, artillery, fortifications, railroads, bridges, battlefields, officers, and ordinary soldiers. Brady was more of a project manager. He spent his time supervising his photographers, preserving their negatives, and buying negatives from other photographers.

Two days after the battle at Antietam, two photographers from Brady's New York gallery took a series of photographs that ushered in a new era in the visual documentation of war. This was the first time that cameras had been allowed near the action before the fallen bodies of the dead were removed. Within a month of the battle, the images of battlefield corpses from Antietam were on display at Brady's gallery in New York. A sign on the door said simply, "The Dead of Antietam." America was shocked. The exhibition marked the first time most people had ever seen the carnage of the war. The photographs had a sensational impact, opening people's eyes as no woodcuts or lithographs had ever done.

The New York Times wrote, "If Mr. Brady has not brought bodies and laid them in our door-yards, he has done something very like it." Thousands of people, especially mothers and wives of men serving in the Union forces, flocked to look at these first dramatic images of death and destruction. Suddenly the battlefield was no longer comfortably distant—the camera was bringing it closer, erasing romantic notions about war.

Mathew Brady's work was the first instance of the comprehensive photo-documentation of a war—the Civil War—which as a result became the first media war. Photography had come of age, although it was still a relatively new technology with several limitations. For example, the exposure time of the camera was slow, and negatives had to be prepared minutes before a shot and developed immediately afterwards. This meant that it was not possible for photographers to take action pictures. They were limited to taking pictures of the battlefield after the fighting was over. Another limitation was that newspapers couldn't yet reproduce photographs. They could print only artists' drawings of the scene. Nevertheless, photography made a huge impact, and media coverage of war—and public opinion about war—would never be the same again.

29. What is the main idea of the lecture?
30. Listen again to part of the lecture. Then answer the question.
    "The battle at Antietam Creek in 1862 was the bloodiest twenty-four hours of the Civil War. Nearly 8,000 men lost their lives and another 15,000 were severely wounded. No single day in American history has been as tragic."
    What does the professor mean by this statement:
    "No single day in American history has been as tragic."
31. Who was Mathew Brady?
32. Listen again to part of the lecture. Then answer the question.
    "Within a month of the battle, the images of battlefield corpses from Antietam were on display at Brady's gallery in New York. A sign on the door said simply, 'The Dead of Antietam.' America was shocked. The exhibition marked the first time most people had ever seen the carnage of the war. The photographs had a sensational impact, opening people's eyes as no woodcuts or lithographs had ever done."
    Why does the professor say this:
    "The photographs had a sensational impact, opening people's eyes as no woodcuts or lithographs had ever done."
33. What were some of the limitations of photography during the Civil War?
34. What does the professor imply about Mathew Brady?

TEST 3, Track 8

SPEAKING SECTION DIRECTIONS (p. 522)

The Speaking section measures your ability to speak in English about a variety of topics. There are six questions in this section. Record your response to each question on a cassette.

Questions 1 and 2 are independent speaking tasks in which you will speak about familiar topics. Your responses will be scored on your ability to speak clearly and coherently about the topics.

Questions 3 and 4 are integrated tasks in which you will read a passage, listen to a conversation or lecture, and then speak in response to a question about what you have read and heard. You will need to combine relevant information from the two sources to answer the question completely. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

Questions 5 and 6 are integrated tasks in which you will listen to part of a conversation or lecture, and then speak in response to a question about what you have heard. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You will hear each conversation and lecture only one time. You may take notes while you listen. You may use your notes to help you answer the questions.

TEST 3, Track 9

Describe an event such as a holiday or other occasion that you enjoy celebrating. Explain why the event is significant to you. Include details and examples to support your explanation.

TEST 3, Track 10

Some people keep in touch with friends and family by letter or e-mail. Others keep in touch by telephone. Which method do you prefer to use, and why? Include details and examples in your explanation.

TEST 3, Track 11

Now listen to two students as they discuss the required discussion section.

W: What do you think of the new requirement? Starting next quarter, we need a discussion section for every lecture course we take.
M: It sounds like something I'm OK with.

W: Oh, I think it's just a bother. We already have three hours of lecture every week.
M: But that's not enough. The professor never covers everything we need to know for the examination. And there's hardly any time to ask questions.
W: Oh, but you can ask the professor questions during office hours.
M: Have you ever actually tried to do that? Some professors are never in their office, and the ones who are, well … they're usually too busy to talk to students. I like the idea of a discussion section. It gives us more of a chance to talk to the teacher, and other students too. Lecture classes are so big that you never get to know your classmates. Discussion classes have only around 20 or 25 people, and that's really nice. It's a lot more personal and informal, and you can learn so much more. Besides, it's easy to get a high grade in the discussion section.

The man expresses his opinion about the required discussion section. State his opinion and explain the reasons he gives for holding that opinion.

TEST 3, Track 12

Now listen to part of a lecture in a zoology class.

One example of a homeostatic system is temperature control, by which some animals can maintain a constant internal body temperature. The large ears of a rabbit are an amazing device in homeostasis. The rabbit can regulate the amount of blood flowing through blood vessels of its big ears. This adjusts heat loss to the rabbit's surroundings and maintains the stability of the rabbit's body temperature.

The control center for body temperature is the brain, and nerve cells in the skin do much of the work. Here's what happens. When the rabbit's body temperature increases, because of exercise or hot surroundings, the rabbit's brain notices the change and it sets out to bring the temperature back to normal. So the brain turns on the body's cooling system. In the rabbit's ears, the blood vessels expand and fill with warm blood. Heat is then able to escape from the surface of the skin on the ears. This causes the rabbit's body temperature to drop, and the brain can then turn off the cooling system.

On the other hand, when the rabbit's body temperature decreases because of cold surroundings, the brain turns on the body's warming system. Blood vessels in the ears constrict and get narrow, and send blood from the skin to deeper parts of the rabbit's body. And this reduces heat loss from the ears.

The professor describes the large ears of a rabbit. Explain how the rabbit's ears are used in homeostasis.

TEST 3, Track 13

Now listen to a conversation between a student and a college administrator.

M: May I help you?
W: I hope so. I need to get an official copy of my transcript, but it seems I can't do that because there's an unpaid charge in my student account. The charge is a mistake—it's for a window my roommate broke in our dormitory room. Somehow the charge ended up on my account instead of hers. The problem is, I need my transcript right away because I'm applying for a scholarship.
M: I see. Well, the fastest thing would be for you to just pay the charge to clear your account, and then have your roommate pay you back. Or you could send your roommate in to pay it.
W: Can't you just remove the charge from my account? After all, it's the university's mistake.
M: I can't do that until I get approval from the Housing Office, and that could take a while. But here's what you can do. Go down the hall right now and talk to the dean's secretary. Tell her what you've told me. She might let us release your transcript now, and then we can worry about the problem on your account later.

Describe the woman's problem and the suggestions the man makes about how to deal with it. What do you think the woman should do, and why?

TEST 3, Track 14

Now listen to part of a talk in a linguistics class.

The communication between a baby and a parent—especially the mother—has many of the same features as communication in music. One feature is timing. A mother and a child have a shared sense of timing, both before and after the child is born. It's like the mother and child kind of "swing" together in a common rhythm.

Just as one musician will lead another in a performance, a child will often lead the earliest "conversations" with his mother. A baby's sounds are conversational in the way that they connect two people in an exchange of sounds. This interplay between mother and child suggests that a child has, from the very beginning, an ability to communicate with his mother. The child recognizes his mother's voice. He also learns very quickly how to use his own voice in various ways. By the time he's two months old, a baby can make sounds with a musical inflection when he's "talking" with his mother.

The communication between babies and mothers develops from the intense daily contact between them. The mother creates a special language for the child—baby talk—a very special, very musical language. Several studies show that babies understand the patterns of baby talk, and will respond appropriately—by using facial expressions, movements, and their voice.

Babies quickly develop a large vocabulary of sounds. They learn to make meaningful sounds, long before any of these sounds become real words. The meaning lies in the music of the sounds—different meanings expressed by changes in intonation, rhythm, and timing. Babies learn to adjust their voice to match their mother's voice. They will imitate their mother's speech, even after Mother has stopped talking.

Using points and examples from the talk, describe the communication between babies and mothers. Explain how this communication is musical in nature.

TEST 3, Track 15

WRITING SECTION DIRECTIONS (p. 527)

The Writing section measures your ability to use writing to communicate in an academic environment. There are two writing questions.

Question 1 is an integrated writing task. You will read a passage, listen to a lecture, and then answer a question based on what you have read and heard. You have 20 minutes to plan and write your response.

Question 2 is an independent writing task. You will answer a question based on your own knowledge and experience. You have 30 minutes to plan and write your response.

TEST 3, Track 16

Now listen to part of a lecture on this topic in a psychology class.

One area that illustrates the importance of visual–spatial intelligence is the game of chess. An important skill for a chess player to have is the ability to predict moves and their consequences before they're made. This ability to plan ahead is closely tied to having a superior visual sense, or visual imagination, as chess players call it.

In a form of chess called blindfold chess, a person plays several games at the same time. So, for example, a blindfolded chess player might be playing ten games against ten different opponents, moving from table to table around a room. His opponents can see the chessboard, but the blindfolded chess player can't. The blindfolded player's only information about the chessboard is from someone announcing his opponent's last move. So, you can see why a strong visual memory is necessary.

For most chess players, each chess game has its own character, its own shape, and this makes an impression on the player. The blindfolded player has to remember the positions of the chess pieces, since he can't actually see the chessboard. As he tries to recall a given position, he remembers his reasoning at an earlier time, and he remembers a specific move—not all by itself, but … uh … instead, he remembers his specific strategy and why that move was necessary.

Chess players have strong visual memories of important games they've played in the past. This memory isn't just simple, rote recall. It's really the memory of the game's patterns of reasoning. The chess player's memory stores plans and ideas and strategies—not just a rote list of moves.

Chess masters have an amazing ability to reconstruct a chessboard they've seen for just a few seconds—if the pieces on the board are set in meaningful positions, as they are in the middle of a real game. But if the chess pieces are randomly located, then they don't have any real meaning, and the chess master may or may not be able to reconstruct the board.

Summarize the points made in the lecture, explaining how they illustrate points made in the reading.

TEST 4

TEST 4, Track 1

LISTENING SECTION DIRECTIONS (p. 544)

The Listening section measures your ability to understand conversations and lectures in English. You will hear each conversation and lecture only one time. After each conversation or lecture, you will hear some questions about it. Answer all questions based on what the speakers state or imply.

You may take notes while you listen. You may use your notes to help you answer the questions.

Most questions have four possible answers. In some questions, you will see this icon: 🎧. This means that you will hear, but not see, part of the question.

Some questions have special directions, which appear in a gray box. Most questions are worth one point. If a question is worth more than one point, special directions will indicate how many points you can receive.

You have approximately 40 minutes to complete the Listening section. This includes the time for listening to the conversations and lectures and for answering the questions.

To make this practice more like the real test, cover the questions and answers during each conversation and lecture. When you hear the first question, uncover the questions and answers.

TEST 4, Track 2

Questions 1 through 5. Listen to a conversation in a university housing office.

M: Hi. Um … I live in Tower One … and I was … um … I'd kind of like to live in a smaller building. I'm thinking of moving next semester.
W: Do you know about the villages? They're on the other side of campus from the towers.
M: Uh huh. I've seen them—I mean, from the outside. What's the rent like? I mean, compared to the towers.
W: The rent depends on the situation, like how many people are in the suite.
M: Suite? What's that?
W: It's a unit for either four, six, or eight people. They're like apartments.
M: Oh. Aren't there any private rooms?
W: No, not in the villages. It's all suites. The bedrooms are for two people—that part's kind of like in the dormitories. You have to share a bedroom with another student. The suites have two to four bedrooms, one or two bathrooms, and a kitchen with a stove and a microwave, and a full refrigerator. Some of them also have a big living room.
M: Oh, that sounds kind of nice. So … what's the rent like?
W: I've just been checking in the computer. It looks like there's going to be a couple of openings next semester, but there's also a waiting list with about twenty-something people on it.
M: Oh.

W: Yeah. A lot of people want to live in the villages. I lived there for two years myself, before I moved to a house off campus.
M: Uh huh. So what is the rent?
W: Oh, sorry. Um … OK, the buildings in Swanson Village all have four–person suites. Those are 900 dollars a semester.
W: Wow.
M: And the other villages … let me see … they're anywhere from eight–fifty to a thousand. It depends. The six– and eight–person units are usually a little less. The ones with living rooms are a little more.
M: Wow. That's more than I expected.
W: The cheaper ones are less than the dorms in the towers.
M: Yeah, but I was hoping it'd be a lot less. But still … I'd kind of like to get out of the towers. Um … how do I get on the waiting list?
W: I can add your name now, if you like.
M: OK. It's Ian Jacobs.
W: Ian Jacobs. OK, Ian, I've added you to the waiting list. What we'll do is send you a notice by e–mail if something opens up in the villages. Your name is uh … number twenty–seven on the list.
M: Number twenty–seven … oh … wow.
W: You'd be surprised. Sometimes people change their minds, so people further down the list get a chance. You'll get in the villages eventually, maybe next semester.
M: OK. Thanks for your help.
W: No problem. Have a nice day!

1. What is the purpose of the conversation?
2. What are some features of the suites in the villages?
3. Listen again to part of the conversation. Then answer the question.
   "Oh, that sounds kind of nice. So … what's the rent like?"
   "I've just been checking in the computer. It looks like there's going to be a couple of openings next semester, but there's also a waiting list with about twenty–something people on it."
   "Oh."
   "Yeah. A lot of people want to live in the villages. I lived there for two years myself, before I moved to a house off campus."
   "Uh huh. So what is the rent?"
   "Oh, sorry."
   Why does the woman say this:
   "Oh, sorry."
4. What does the man think of the cost of rent in the villages?
5. Listen again to part of the conversation. Then answer the question.
   "Ian Jacobs. OK, Ian, I've added you to the waiting list. What we'll do is send you a notice by e–mail if something opens up in the villages. Your name is uh … number twenty–seven on the list."
   "Number twenty–seven … oh … wow."
   Select the sentence that best expresses how the man probably feels.

TEST 4, Track 3

Questions 6 through 10. Listen to a conversation between two students.

W: Our design class is getting really interesting, don't you think?
M: Yeah, I like Professor Vargas, but sometimes he goes too fast, and I feel like I'm missing something. There's a lot we have to remember.
W: True. There are a lot of details about all the different styles.
M: Yeah, there's Art Nouveau, and Art Deco, and Art Moderne … I have a hard time keeping it all straight.
W: I know what you mean.
M: For example, it seems to me that Art Deco and Art Moderne are the same thing.
W: Well, there is some overlap. They were both popular in the 1930s, although Art Deco came a little before Moderne. I think Professor Vargas said Art Deco started at an exhibition in Paris in 1925.
M: So, they were about the same time. That's one thing that gets confusing. Another thing is, they seem so similar it's hard to see why they're considered different styles.
W: Art Deco has more decoration than Art Moderne. Art Deco is the style you see in a lot of movie theaters and hotels that were built in the twenties and thirties. It has facades with geometric designs … and uh … strips of windows with decorative spandrels. Art Deco uses a lot of straight lines and slender forms. "Sleekness" is the word that comes to mind. At the time, it was considered "modernistic."
M: But that's what gets confusing! Doesn't "modernistic" also apply to Art Moderne?
W: Art Moderne is simpler than Deco. It has … uh … things like more rounded corners, flat roofs, and … the walls are smooth and don't have any decoration. It's more streamlined than Deco. Art Moderne buildings remind me of boats. The walls are smooth, and the trim is usually stainless steel. A lot of the windows are round, kind of like the portholes on a boat.
M: Oh … I know a building like that. It's right here in town, on Second Avenue. It has a rounded corner and round windows. It used to be a gas station, but now it's a restaurant. We should go there sometime.
W: Yeah, I'd like to see that. My favorite building is the Maritime Building. It's downtown, right across from my father's office. It's Art Deco—built in 1927—I know that from the cornerstone. You should see the lobby! It's just beautiful. There's a geometric pattern in the tile on the floor—kind of a big circle with lots of triangles. And you should see the elevator doors. They're gorgeous.
M: You know, we should go around and look at some of these buildings.
W: Yeah, that would be fun.
M: And … you know what else … this is an idea for our project. We could take pictures of the buildings and do a slide show in class.
W: Oh, that's a cool idea! But don't we need to get permission to take photographs? Especially of the interior … we need pictures of the lobby of the Maritime Building.

M: We could ask for permission. That shouldn't be a problem. Let's talk to Professor Vargas and see what he thinks.
W: OK. Why don't you do that, and I'll go down to the Maritime Building and see if there's anyone there—like a building superintendent—who can give us permission. I'll let you know. Why don't we meet again on Thursday?
M: OK. Fine with me.

6. What are the students mainly discussing?
7. Listen again to part of the conversation. Then answer the question.
"Yeah, I like Professor Vargas, but sometimes he goes too fast, and I feel like I'm missing something. There's a lot we have to remember."
"True. There are a lot of details about all the different styles."
"Yeah, there's Art Nouveau, and Art Deco, and Art Moderne … I have a hard time keeping it all straight."
Select the sentence that best expresses how the man probably feels.
8. How does the woman help the man?
9. Indicate whether each sentence below describes Art Deco or Art Moderne.
10. What can be inferred from the conversation?

TEST 4, Track 4

Questions 11 through 16. Listen to part of a lecture in a world history class.

For thousands of years, early peoples found their food in nature. They hunted and fished, and ate plants and fruits that grew wild. What led these people to invent agriculture, a completely different way of life?

We know that ancient people changed from hunters and gatherers to farmers when they began to domesticate wild plants and animals. The first farmers on each continent did not have other farmers to observe, so they could not have chosen farming consciously. However, once agriculture had started in one part of a continent, neighboring people could see the result and make the conscious decision to farm.

We have no written records about prehistoric agriculture in the Americas, and very few artifacts or physical clues. We do have evidence that early people used sharp sticks to dig furrows for planting seeds. Those sticks were probably the first agricultural tools. We think the first Americans began to grow crops around ten thousand years ago. The evidence comes from a cave in Mexico, where cultivated squash seeds have been found. These seeds are evidence of the early domestication of plants.

Hunting–gathering people selected wild plants for domestication for various reasons. Some plants had tasty fruit, some had fleshy or seedless fruit, and some had fruit with oily or tasty seeds. In a certain part of prehistoric Mexico, there was a kind of squash that grew in abundance on hillsides. The flesh of this squash was bitter, so the people didn't eat it, but the seeds were tasty and nourishing, and the people liked to gather them. The people brought the squash seeds back to their camp. As they ate the seeds, some seeds fell to the ground all around the camp. Later, some of these seeds germinated and produced new plants. Thus, the hunter–gatherers became farmers sort of by accident. It was probably not a conscious decision to plant squash in their camp, yet that was the result.

Now the people had a wild garden of squash plants at their campsite. This was fortunate, so they started to take more of an interest in the plants. They tried to protect the plants in practical ways. They cut back and cleared out the less healthy–looking plants. They pulled up other types of plants that were weeds. They gave the plants water during long dry spells. Eventually, the people realized that seeds grew better when they were planted in earth that was turned over. So they began to scratch the earth with a digging stick and to plant seeds systematically in rows. They realized that a tilled, watered, weeded garden provided larger, better, more numerous squash plants than those that grew naturally on a dry hillside. Thus, with a series of conscious decisions, the people started cultivating a new breed of squash plants. Because of their success with squash, they started to experiment with other kinds of plants. In time, they built a fence around the garden to protect it from animals. At this point, agriculture was firmly established in their culture.

Of course, all of this didn't happen overnight. The process probably took thousands of years. Different peoples acquired agriculture at different times in prehistory. In some areas, crops and agricultural technology spread as ancient peoples conquered and traded with one another. In other places, agricultural technology developed in isolation. Even so, it's very likely that the change from a hunting–gathering society to an agricultural society followed a similar pattern in different regions of the world.

11. What is the main purpose of the lecture?
12. What is probably true about the origins of agriculture?
13. The professor explains how the early people of Mexico probably started farming. Summarize the process by putting the events in order.
14. Why did the people begin to use digging sticks?
15. Listen again to part of the lecture. Then answer the question.
"Because of their success with squash, they started to experiment with other kinds of plants. In time, they built a fence around the garden to protect it from animals. At this point, agriculture was firmly established in their culture. Of course, all of this didn't happen overnight."
Why does the professor say this:
"Of course, all of this didn't happen overnight."
16. What point does the professor make about the transition from hunting–gathering to agriculture?

TEST 4, Track 5

Questions 17 through 22. Listen to part of a discussion in an ecology class. The class is studying the hydrologic cycle.

W1: Water is essential for life, and in parts of the world, it's a precious commodity. Water continuously circulates from the ocean to the atmosphere, to the land, and back to the ocean, providing us with a renewable supply of purified water. This complex cycle—known as the hydrologic cycle—balances the amount of water in the ocean, in the atmosphere, and on the land. We get our understanding of how the cycle operates from research in climatology and hydrology. So … who can tell me what climatology is?
M: It's the study of climate … and … uh … the causes and effects of different climates.
W1: That right. And what is hydrology? Sarah?
W2: Well, "hydro" means "water," so it's something to do with water … like the study of water.

W1: Yes, the prefix "hydro" does refer to water. The hydrologic cycle is the water cycle. And hydrology is the study of the water—the distribution and effect of the water—on the earth's surface and in the soil and layers of rock. Think of climatology as the atmospheric phase, and hydrology as the land phase of the water cycle. Climatologists study the role of solar energy in the cycle. They're mainly concerned with the atmospheric phase of the cycle—how solar energy drives the cycle through the … uh … processes of evaporation, atmospheric circulation, and precipitation. Water is continuously absorbed into the atmosphere as vapor—evaporation—and returned to the earth as rain, hail, or snow—precipitation. The amount of water evaporating from oceans exceeds precipitation over oceans, and the excess water vapor is moved by wind to the land.

The land phase of the cycle is the concern of hydrologists. Hydrologists study the vast quantities of water in the land phase of the cycle, how water moves over and through the land, and how it's stored on or within the earth. Over land surfaces—of the precipitation that falls over land, small amounts evaporate while still in the air and … uh … reenter the atmosphere directly. The rest of it reaches the surface of the land. The water that falls to earth is stored on the surface in lakes, or it penetrates the surface, or it runs off over the surface and flows in rivers to the ocean. Some of the water is stored temporarily in the upper soil layers and used later by trees and plants. When it rains—yes?

M: I was … um … I wondered if that makes trees and plants part of the hydrologic cycle. I mean, they take in water, and the water moves through them, and then later on … um … the water evaporates from their leaves.

W1: I'm glad you mentioned that, Justin. Plants do play an important role in the land phase of the cycle and are therefore part of the cycle. Trees and plants circulate and store water—they draw it up through their roots and return it to the atmosphere through their leaves during evapotranspiration.

When it rains, if the soil is already saturated, water will seep downward through the upper soil layers, and possibly reach the water table. When it reaches the water table, it passes into groundwater storage. Most of the groundwater later returns to the surface, either as springs or as stream flow, supplying water to plants.

Eventually, all of the water falling on land makes its way back to the ocean. The movement of water from land to the ocean is called runoff. Runoff and groundwater together balance the amount of water that moves from the ocean to the land.

Every molecule of water in the natural system eventually circulates through the hydrologic cycle. Tremendous quantities of water are cycled annually. And, as Justin pointed out, living organisms—plants, and animals as well—are also part of the cycle, since water is a large part of the mass of most organisms. Living organisms store and use water, since water is the … uh … solvent for most biological reactions.

17. What is the hydrologic cycle?
18. Identify the area in the diagram that mainly concerns climatologists.
19. What do hydrologists mainly study?
20. What happens to water that falls to the earth as precipitation?
21. Why does the professor say this:
"Eventually, all of the water falling on land makes its way back to the ocean. The movement of water from land to the ocean is called runoff. Runoff and groundwater together balance the amount of water that moves from the ocean to the land."
22. What can be inferred about plants in the hydrologic cycle?

TEST 4, Track 6

Questions 23 through 28. Listen to part of a lecture in a Canadian studies class. The professor is talking about art.

The painter Arthur Lismer wrote, "Most creative people, whether in painting, writing or music, began to have a guilty feeling that Canada was as yet unwritten, unpainted, unsung." According to Lismer, there was a job to be done, and so a generation of artists set out to create a school of painting that would record the Canadian scene and reinforce a distinctive Canadian identity. Calling themselves the Group of Seven, they proclaimed that—quote, "Art must grow and flower in the land before the country will be a real home for its people."

The Group's origins date back to the 1911 showing in Toronto of the painting "At the Edge of the Maple Wood" by A.Y. Jackson of Montreal. This painting's vibrant color and texture made a deep impression on local artists. They persuaded Jackson to come to Toronto and share a studio with them. Jackson began to accompany another painter, Tom Thomson, on sketching trips to Algonquin Park, north of the city.

Several of the artists worked at the same Toronto commercial design firm, and it was here that they met and discovered their common artistic interests. After work, they socialized together at the Arts and Letters Club. They talked about finding a new direction for Canadian art, a distinctly Canadian style of painting. It was a romantic quest—mainly fueled by the restless spirit of Tom Thomson, who led the others to the Canadian wilderness to sketch and paint.

A patron gave the artists the famous Studio Building in Toronto. It was here that Thomson did some of his finest paintings from sketches made in the wild. Among them was "The Jack Pine," one of the nation's best-loved pictures. But then, suddenly and tragically, Thomson died in 1917—drowning in a canoe accident—shocking his fellow painters and Canadian art lovers.

The other artists continued their sketching trips to the vast wilderness of northern Ontario. It was there that they found inspiration for some of their greatest paintings. Each artist had his own vision and his own technique, but they all captured the essence of wilderness Canada—a bleak, somber, incredibly beautiful landscape of rock outcroppings, storm-driven lakes, and jack pine trees—a land totally uninhabited by people.

After a 1919 trip to the wilderness, the artists decided to organize an exhibition and to formally call themselves the Group of Seven. The seven founding artists were Jackson, Lismer, Harris, MacDonald, Varley, Johnston, and Carmichael.

Their 1920 exhibition was an important moment in Canadian art. It proclaimed that Canadian art must be inspired by Canada itself. However, the initial response was less than favorable. Several major art critics ignored the show, while others called the paintings crude and barbaric. Yet, when British critics praised the Group's distinctly Canadian vision, the Canadian public took another look. Later exhibitions drew increasing acceptance for the Group's work, establishing them as the "national school." Before long, they were the most

influential painters in the country, and several of their paintings have become icons of Canada.

A.Y. Jackson was influential for his analysis of light and shadow. Arthur Lismer's work has an intensity all its own—particularly his painting of the "Canadian Jungle," the violently colored forest in the fall. Lawren Harris went further than the rest in simplifying the forms of nature into sculptural shapes, organizing an entire scene into a single, unified image, and eventually into abstraction.

23. Which of the following best describes the organization of the lecture?
24. What is the professor's point of view concerning the Group of Seven?
25. Listen again to part of the lecture. Then answer the question.
    "After work, they socialized together at the Arts and Letters Club. They talked about finding a new direction for Canadian art, a distinctly Canadian style of painting. It was a romantic quest—mainly fueled by the restless spirit of Tom Thomson, who led the others to the Canadian wilderness to sketch and paint."
    Why does the professor say this:
    "It was a romantic quest—mainly fueled by the restless spirit of Tom Thomson, who led the others to the Canadian wilderness to sketch and paint."
26. What subjects did the Group of Seven paint?
27. What does the professor mean by this statement:
    "Before long, they were the most influential painters in the country, and several of their paintings have become icons of Canada."
28. Listen again to part of the lecture. Then answer the question.
    "A.Y. Jackson was influential for his analysis of light and shadow. Arthur Lismer's work has an intensity all its own—particularly his painting of the "Canadian Jungle," the violently colored forest in the fall. Lawren Harris went further than the rest in simplifying the forms of nature into sculptural shapes, organizing an entire scene into a single, unified image, and eventually into abstraction."
    What can be concluded about the Group of Seven's style of painting?

TEST 4, Track 7

Questions 29 through 34. Listen to part of a talk in a business management class.

What do we mean when we talk about leadership? First, it's important not to confuse leadership with power. It's true that—by definition—leaders always have some degree of power. Leaders have power because of their ability to influence other people. However, many power holders do not have the qualities of leadership. Consider the headwaiter in your favorite restaurant. The headwaiter has power to some degree—for example, the power to seat you at the best table by the window—but he doesn't necessarily have the qualities we associate with leadership.

We have to distinguish between leaders and power holders. There are a lot of powerful people who lack leadership skills. A military dictator has power. So does the robber who sticks a gun in your face and demands your wallet. Leadership is something else.

Leadership and power are not the same thing, although they are similar in this one way. Both leadership and power involve the ability to … bring about the results you want, and to … prevent the results that you don't want to happen.

Here's another way to think of it. In sociological terms, … uh … power is simply the ability to bring about certain behavior in other people. For example, parents have power over their children, and they use it to get their children to behave in acceptable ways. Teachers have power, and so do mid-level managers—all as a result of their position.

Where does power come from? The sources are varied. Probably the oldest source of power is the ability to use physical force—a source available to both the military and the biggest kid on the playground. The power that comes from physical might is not the same as leadership. Just think of the military dictator … or the school bully. We don't usually think of these power holders as leaders—despite the brute force they use to control others.

Wealth, position, the ability to motivate—all of these are sources of power. Being close to others with power is a source of power. That's why people gravitate toward political leaders. Some power comes from qualities people were born with—like physical beauty, or the ability to influence friends. Science and technology are also sources of power. Corporations understand this and spend huge amounts of money on research, information systems, and consultants.

Although leadership and power are different things, they're related in important ways. Consider, for example, a chief executive officer who has the ability to motivate people, a CEO with vision, who can lift the spirit of his or her employees and bring about a rise in productivity—that is leadership. But consider this scenario. The company realizes they're sort of falling behind in the technology race, so the CEO responds by increasing the amount of money available to the company's research division. That is the exercise of power. Authorizing a spending increase could have been made only by a chief executive with the power to do so. Remember, both leadership and power involve the ability to accomplish the results you want, and successful managers understand how the two work together to make this happen.

29. What is the talk mainly about?
30. Why does the professor talk about the headwaiter in a restaurant?
31. Why does the professor say this:
    "A military dictator has power. So does the robber who sticks a gun in your face and demands your wallet. Leadership is something else."
32. According to the professor, how are leadership and power similar?
33. According to the professor, which of the following are sources of power?
34. Listen again to part of the talk. Then answer the question.
    "Authorizing a spending increase could have been made only by a chief executive with the power to do so. Remember, both leadership and power involve the ability to accomplish the results you want, and successful managers understand how the two work together to make this happen."
    What does the professor imply about successful managers?

TEST 4, Track 8

SPEAKING SECTION DIRECTIONS (p. 550)

The Speaking section measures your ability to speak in English about a variety of topics. There are six questions in this section. Record your response to each question on a cassette.

Questions 1 and 2 are independent speaking tasks in which you will speak about familiar topics. Your responses will be scored on your ability to speak clearly and coherently about the topics.

Questions 3 and 4 are integrated tasks in which you will read a passage, listen to a conversation or lecture, and then speak in response to a question about what you have read and heard. You will need to combine relevant information from the two sources to answer the question completely. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

Questions 5 and 6 are integrated tasks in which you will listen to part of a conversation or lecture, and then speak in response to a question about what you have heard. Your responses will be scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You will hear each conversation and lecture only one time. You may take notes while you listen. You may use your notes to help you answer the questions.

TEST 4, Track 9

What foreign country would you like to visit? Choose a country and explain why you would like to go there. Include details and examples to support your explanation.

TEST 4, Track 10

In some schools, teachers decide what classes students must take. Other schools allow students to select their own classes. Which system do you think is better and why? Include details and examples in your explanation.

TEST 4, Track 11

Now listen to two students as they discuss the swimming pool hours.

M: What do you think about the new pool hours?
W: It doesn't affect me much, since I only swim on weekends, and those times aren't changing. What about you?
M: Well, it's kind of a big change to the pool schedule. They're completely eliminating times in the late afternoon, after three o'clock. That's when I like to swim—right after my last class.
W: It looks like they're adding more swimming classes in the afternoon and evening.
M: Yeah, but I don't see why they have to close the pool to everyone else. A class doesn't usually take up the whole pool. I don't see why they can't leave half of the pool open for people who just want to swim laps. It's not fair to just take away our pool time like this. The least they could do is extend the morning hours. They should open the pool at seven instead of nine in the morning. That would make up for the time they cut in the afternoon.
W: You would go swimming at seven o'clock in the morning?
M: Sure. I'm a morning person—and what a way to start the day!

The man expresses his opinion about the change in swimming pool hours. State his opinion and explain the reasons he gives for holding that opinion.

TEST 4, Track 12

Now listen to part of a talk in a biology class for pre–medical students.

Recently in the clinic we had a patient who had been suffering from tremors of the head that caused headaches. These headaches left her neck stiff and her back sore. In addition, her jaw clicked when she opened and closed her mouth. Sometimes her jaw locked up while she was eating, and she couldn't even open her mouth. Doctors had been treating her symptoms with painkilling medication for 20 years, with little success. The patient felt very frustrated and was willing to try anything to relieve her head, neck, and jaw problems. Finally, we referred her to the chiropractic clinic.

After her third visit to the chiropractor, the patient noticed a huge difference. Her headaches and lockjaw were gone, and the head tremors greatly reduced. She was able to stop taking painkillers. Patient success stories like this one are a big reason why chiropractic is becoming more accepted in the medical establishment. Research findings are also helping to increase acceptance. In a survey of doctors taken two years ago, for example, 62 percent of the physicians said that chiropractic treatment helped their patients.

Describe the patient's symptoms, and explain why chiropractic treatment was recommended. Explain how this patient's experience supports the practice of chiropractic.

TEST 4, Track 13

Now listen to a conversation between two students.

M: So, have you registered for the next semester yet?
W: Not yet. I want to take statistics, but the course is already full. So it looks like I have to take a different math course, like maybe calculus. But I'd much rather take statistics.
M: If you want statistics, why don't you register to get on the waiting list? Then if someone drops it, you might get in.
W: Do you think so? I didn't think of that.
M: You could register for both courses. Get on the waiting list for statistics, and also register for calculus—that way you'll be sure to get one of the classes. If you get in statistics, you can drop calculus.
W: I guess I could try that.
M: Another thing you could do is talk to the instructor that teaches statistics. If you can convince the instructor that you really want the class, maybe they'll let you in anyway, even though the class is full. It's worth a try.

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

TEST 4, Track 14

Now listen to part of a lecture in a psychology class. The professor is discussing children's fears.

All children experience periods of fear. Fears are normal, and they help children solve issues of change and development. Fears also call parents' attention to a child's situation so the parent will provide extra support when the child needs it.

The fear of falling is built into each newborn baby in the form of a clasping motion. A baby will make this motion when he is uncovered or surprised, or when he is dropped suddenly. His arms shoot out sideways and then come together as if to grab anything or anyone nearby. The baby usually cries out when he makes this motion. The startled cry attracts a parent's attention. Thus, even from birth, a baby is able to use this natural fear of falling to get help.

Another fear that babies have is the fear of strangers, a natural fear that alerts the child to a new situation. Anxiety around strangers is one of the earliest signs of fear in babies. In studies that filmed babies as they played with adults, it was shown that even at one month old, the babies could distinguish between their mother, father, and strangers, and they showed this with clear differences in their own responses.

Fears appear during periods of new and rapid learning. At one year old, and all through the second year, a whole new world opens up when children learn to walk. They will both value and fear their new independence. At the same time they learn to run away from their parents, children also find new things to be afraid of—dogs, loud noises, strange people and places. Fears help children adjust to their new independence. By overcoming their fears, children acquire confidence in their own new abilities.

Using points and examples from the lecture, describe fears that young children experience, and explain how these fears help children.

TEST 4, Track 15

WRITING SECTION DIRECTIONS (p. 555)

The Writing section measures your ability to use writing to communicate in an academic environment. There are two writing questions.

Question 1 is an integrated writing task. You will read a passage, listen to a lecture, and then answer a question based on what you have read and heard. You have 20 minutes to plan and write your response.

Question 2 is an independent writing task. You will answer a question based on your own knowledge and experience. You have 30 minutes to plan and write your response.

TEST 4, Track 16

Now listen to part of a talk on this topic in an ecology class.

Nothing is more dependable than the lowly earthworm … right? Well, not exactly. We now know that earthworms are causing significant damage to some forests. The problem is, they're destroying the soil cover. Native plant communities are disappearing, and so is the habitat for a lot of different animals. It's because earthworms change the structure of the soil, and change how nutrients are cycled … it's because of this that they have such a huge, rippling effect on forest ecosystems.

The idea that worms are suddenly a problem isn't easy for us to grasp, but now we have evidence of their damage. There's a forest ecologist in Minnesota who's studying the soil near a popular fishing lake. She noticed that the forest floor was changing rapidly near the shoreline of the lake, where fishers dump their unused bait worms. A thick layer of spongy duff was disappearing, and so were the native wildflowers. When she took a shovel and looked at the soil, she could see that earthworms were present in large numbers wherever the duff was disappearing.

The worms are doing just what gardeners like them to do. They're taking organic matter from the surface—in this case, the leaf litter and decaying branches—and they're moving it down deeper into the soil. Except that here, by the lakeshore, they're cleaning the forest floor so well that fallen leaves disappear in just a few weeks.

The decaying leaves in the duff are of vital importance to the forest ecosystem. Duff contains the nutrients that are slowly released into the soil—the nutrients that plants need to sprout. But worms are literally eating the forest floor right out from under the plants. And the disappearance of the duff has an effect beyond the native plants. The duff also gives shelter to salamanders, insects, and spiders … so when the duff disappears, so do these animals and the other animals that feed on them.

Describe the problems caused by earthworms in forest ecosystems, and explain how these problems contradict information in the reading.

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PROGRESS CHARTS

Record your quiz and test scores on Progress Charts 1 through 5. Use the charts to monitor your achievement and set goals for future study. You can remove the charts from the book and put them in a portfolio of your work to show your instructor.

The left column of each chart shows the percentage correct on quizzes and tests. The bottom row of Progress Charts 1 through 4 refers to relevant units to study for each quiz.

Example of Progress Chart 1 – Reading Quizzes

% Correct	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8	Quiz 9	Quiz 10
100%	10	25	10	25	10	25	10	25	10	25
		24		24		24		24		24
90%	9	23	9	23	9	23	9	23	9	23
		22		22		22		22		22
		21		21		21		21		21
80%	8	20	8	20	8	20	8	20	(8)	(20)
		19		19		19		(19)		19
70%	7	18	(7)	18	(7)	(18)	(7)	18	7	18
		(17)		17		17		17		17
		16		(16)		16		16		16
60%	(6)	15	6	15	6	15	6	15	6	15
		14		14		14		14		14
50%	5	13	5	13	5	13	5	13	5	13

Example of Progress Chart 5 – Tests

% Correct	Test 1				Test 2				Test 3				Test 4			
	R	L	S	W	R	L	S	W	R	L	S	W	R	L	S	W
100%	42	34	24	10	42	34	24	10	42	34	24	10	42	34	24	10
	41	33			41	33			41	33			41	33		
	40	32	23		40	32	23		40	32	23		40	32	23	
	39				39				39				39			
90%	38	31	22	9	38	31	22	9	38	31	22	9	38	31	22	9
	37	30			37	30			37	30			37	30		
	36	29	21		36	29	21		36	29	21		36	(29)	21	
	35	28	20		35	28	20		35	28	20		35	28	20	
	34	27			34	27			34	(27)			34	27		
80%	33		19	(8)	33		19	8	33		19	8	(33)		19	(8)
	32	26			(32)	26			(32)	26			32	26		
	31	25	18		31	25	18		31	25	18		31	25	18	
	30	(24)			30	24			30	24			30	24		
70%	29	23	17	7	29	23	17	(7)	29	23	17	(7)	29	23	(17)	7
	28	22	16		(28)	22	16		28	22	(16)		28	22	16	
	27	21			27	21			27	21			27	21		
	(26)		(15)		26		(15)		26		15		26		15	
60%	25	20		6	25	20		6	25	20		6	25	20		6
	24	19	14		24	19	14		24	19	14		24	19	14	

PROGRESS CHART 1

Reading Quizzes

Circle the number correct on each quiz. Draw a line to connect the circles.

% Correct	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8	Quiz 9	Quiz 10
100%	10	25	10	25	10	25	10	25	10	25
		24		24		24		24		24
90%	9	23	9	23	9	23	9	23	9	23
		22		22		22		22		22
		21		21		21		21		21
80%	8	20	8	20	8	20	8	20	8	20
		19		19		19		19		19
70%	7	18	7	18	7	18	7	18	7	18
		17		17		17		17		17
		16		16		16		16		16
60%	6	15	6	15	6	15	6	15	6	15
		14		14		14		14		14
50%	5	13	5	13	5	13	5	13	5	13
		12		12		12		12		12
		11		11		11		11		11
40%	4	10	4	10	4	10	4	10	4	10
		9		9		9		9		9
30%	3	8	3	8	3	8	3	8	3	8
		7		7		7		7		7
		6		6		6		6		6
20%	1	5	1	5	1	5	1	5	1	5
Units to Study	1.1 thru 1.2	1.1 thru 1.3	1.4	1.1 thru 1.4	1.5 thru 1.6	1.1 thru 1.6	1.7 thru 1.8	1.1 thru 1.8	1.9 thru 1.10	1.1 thru 1.10

PROGRESS CHART 2

Listening Quizzes

Circle the number correct on each quiz. Draw a line to connect the circles.

% Correct	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8
100%	10	10	10	10	10	10	10	10
90%	9	9	9	9	9	9	9	9
80%	8	8	8	8	8	8	8	8
70%	7	7	7	7	7	7	7	7
60%	6	6	6	6	6	6	6	6
50%	5	5	5	5	5	5	5	5
40%	4	4	4	4	4	4	4	4
30%	3	3	3	3	3	3	3	3
20%	2	2	2	2	2	2	2	2
Units to Study	2.1 thru 2.2	2.1 thru 2.3	2.1 thru 2.3	2.1 thru 2.4	2.1 thru 2.4	2.5 thru 2.6	2.1 thru 2.6	2.1 thru 2.6

PROGRESS CHART 3

Speaking Quizzes

Circle the points earned on each quiz. Draw a line to connect the circles.

% Correct	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8
100%	8	8	8	16	16	16	24	24
				15	15	15	23	23
90%							22	22
	7	7	7	14	14	14	21	21
80%				13	13	13	20	20
							19	19
	6	6	6	12	12	12	18	18
70%				11	11	11	17	17
							16	16
				10	10	10	15	15
60%	5	5	5				14	14
				9	9	9	13	13
50%				8	8	8	12	12
	4	4	4				11	11
40%				7	7	7	10	10
				6	6	6	9	9
	3	3	3	5	5	5	8	8
30%							7	7
				4	4	4	6	6
20%	2	2	2	3	3	3	5	5
Units to Study	3.1 thru 3.4	3.1 thru 3.4	3.1 thru 3.4	3.5 thru 3.10	3.5 thru 3.10	3.5 thru 3.10	3.1 thru 3.10	3.1 thru 3.10

PROGRESS CHART 4

Writing Quizzes

Circle the points earned on each quiz. Draw a line to connect the circles.

% Correct	Quiz 1	Quiz 2	Quiz 3	Quiz 4	Quiz 5	Quiz 6	Quiz 7	Quiz 8
100%	5	5	5	5	5	5	10	10
90%							9	9
80%	4	4	4	4	4	4	8	8
70%							7	7
60%	3	3	3	3	3	3	6	6
50%							5	5
40%	2	2	2	2	2	2	4	4
30%							3	3
20%	1	1	1	1	1	1	2	2
Units to Study	4.1 thru 4.5	4.1 thru 4.5	4.1 thru 4.5	4.6 thru 4.10	4.6 thru 4.10	4.6 thru 4.10	4.1 thru 4.10	4.1 thru 4.10

PROGRESS CHART 5

Tests

Circle the number correct in each test section. Draw four separate lines to connect the circles for Reading, Listening, Speaking, and Writing. See the example on page 692.

% Correct	Test 1				Test 2				Test 3				Test 4			
	R	L	S	W	R	L	S	W	R	L	S	W	R	L	S	W
100%	42	34	24	10	42	34	24	10	42	34	24	10	42	34	24	10
	41	33			41	33			41	33			41	33		
	40		23		40		23		40		23		40		23	
	39	32			39	32			39	32			39	32		
90%	38	31	22	9	38	31	22	9	38	31	22	9	38	31	22	9
	37	30	21		37	30	21		37	30	21		37	30	21	
	36	29			36	29			36	29			36	29		
	35	28	20		35	28	20		35	28	20		35	28	20	
80%	34			8	34			8	34			8	34			8
	33	27	19		33	27	19		33	27	19		33	27	19	
	32	26			32	26			32	26			32	26		
	31	25	18		31	25	18		31	25	18		31	25	18	
70%	30			7	30			7	30			7	30			7
	29	24	17		29	24	17		29	24	17		29	24	17	
	28	23	16		28	23	16		28	23	16		28	23	16	
	27	22			27	22			27	22			27	22		
60%	26	21	15	6	26	21	15	6	26	21	15	6	26	21	15	6
	25				25				25				25			
	24	20	14		24	20	14		24	20	14		24	20	14	
	23	19			23	19			23	19			23	19		
	22	18	13		22	18	13		22	18	13		22	18	13	
50%	21	17	12	5	21	17	12	5	21	17	12	5	21	17	12	5
	20				20				20				20			
	19	16	11		19	16	11		19	16	11		19	16	11	
	18	15			18	15			18	15			18	15		
40%	17	14	10	4	17	14	10	4	17	14	10	4	17	14	10	4
	16				16				16				16			
	15	13	9		15	13	9		15	13	9		15	13	9	
	14	12			14	12			14	12			14	12		
	13	11	8		13	11	8		13	11	8		13	11	8	
30%	12			3	12			3	12			3	12			3
	11	10	7		11	10	7		11	10	7		11	10	7	
	10	9	6		10	9	6		10	9	6		10	9	6	
	9	8			9	8			9	8			9	8		
20%	8	7	5	2	8	7	5	2	8	7	5	2	8	7	5	2

PROGRESS CHART 6

TOEFL® Scores for Tests

Use the TOEFL Score Conversion Tables on the next page to find your TOEFL scores for each test section. Write each section score below in the correct box for each test. To calculate the total test score, add the four section scores.

Section/Test	Test 1	Test 2	Test 3	Test 4
Reading				
Listening				
Speaking				
Writing				
Total Test				

Example

Reading, number correct: 28
Listening, number correct: 26
Speaking, points earned: 15
Writing, points earned: 7

TOEFL section score: 20
TOEFL section score: 19
TOEFL section score: 19
TOEFL section score: 22

Total test score: 20 + 19 + 19 + 22 = 80

TOEFL® SCORE CONVERSION TABLES

To find your approximate TOEFL scores for Test 1 through Test 4, use the tables below. For each test section, look on the correct line for the number of points you earned, and then find your TOEFL section score on the same line. Record your scores on Progress Chart 6 on page 698.

Reading

Points Earned	TOEFL® Section Score
42	30
41	30
40	29
39	28
38	27
37	27
36	26
35	25
34	24
33	24
32	23
31	22
30	21
29	20
28	20
27	19
26	18
25	18
24	17
23	16
22	15
21	14
20	13
19	13
18	12
17	10
16	10
15	9
14	7
13	6
12	5
11	4
10	3
9	2
8	1

Listening

Points Earned	TOEFL® Section Score
34	30
33	29
32	27
31	26
30	25
29	23
28	22
27	21
26	19
25	18
24	17
23	15
22	14
21	14
20	12
19	11
18	10
17	9
16	8
15	8
14	7
13	6
12	5
11	4
10	4
9	3
8	2
7	2
6	1

Speaking

Points Earned	TOEFL® Section Score
24	30
23	29
22	28
21	27
20	26
19	24
18	23
17	22
16	20
15	19
14	18
13	17
12	15
11	14
10	13
9	11
8	10
7	9
6	8
5	6
4	5
3	4
2	3
1	1

Writing

Points Earned	TOEFL® Section Score
10	30
9	28
8	25
7	22
6	20
5	17
4	14
3	11
2	8
1	5