Have you ever wondered what it would be like to touch a living sea star or examine the underside of a horseshoe crab? Have you contemplated how an animal survives in the scorching desert? Where do clouds come from, or how close is the nearest star?

If you’ve asked yourself even one of these questions, there are places you can go to learn the answers. These places are called “living museums.”

What makes a living museum different from other museums? Living museums all have the same goal. They want to preserve and conserve our natural resources. They also want to make people aware of the variety of plants and animals in the world and how important each one is to our survival.

To meet these goals, living museums provide something no other museum can. “We provide kids with a one-on-one experience with animals,” says George Mathews, Jr.. Mr. Mathews is the curatorial director at the Virginia Living Museum in Newport News, Virginia.

Kids visiting these museums are encouraged to touch and experience the many exhibits. Looking at a Gila monster, examining the underground tunnels of a burrowing owl, or scrambling through caves makes learning fun.

At the Virginia Living Museum, visitors are encouraged to experience the “touch tank.” The tank is “home” for a variety of sea animals, including whelks, hermit crabs, sea stars, and horseshoe crabs.

In the museum’s classrooms, children are challenged to a snake race. They get on the floor and wiggle around like snakes. They aren’t allowed to move any body part that a snake can’t move. Other exhibits in the museum include a living beehive and a room filled with night creatures.

The museum also has a nature walk. During the walk, visitors can view Virginia’s wild animals in their natural habitats. “We stay away from the typical zoo setting,” George says. “No bars or cement.”

So how do these living museums make sure their animals’ habitats are just right? It takes a lot of hard detective work. David West, the plant specialist at the Virginia Living Museum, designs the landscapes. He grows the plants that make the animals’ exhibits look so natural.

“With the exception of sunlight, plants are the most important part of our ecological system,” David explains. “People need to understand how important plants are to the health of the world. Plants provide oxygen, stop erosion, and clean our air.”
There’s no better way to understand about clean air and what’s happening in the sky than a visit to the museum’s planetarium. “With television and video games, people just don’t look up anymore,” says Jon Bell. Mr. Bell is the director of astronomy for the museum. As the head of the planetarium, Jon wants to get everyone interested in the wonders of the sky.

The planetarium is equipped with the latest technology—from computers to a star machine. Inside the planetarium, technicians put on a variety of shows. Visitors experience thunderstorms, take a trip underwater, learn why we have rainbows, and examine sunspots on the surface of the sun.

“We make science come alive,” says Pete Money, education director for the Virginia Living Museum. “Doing it, touching it, experiencing it. That’s what we’re all about.”

But if you don’t live in Virginia, where else can you go? Deep in the Sonora Desert in Arizona, you’ll find the Arizona-Sonora Desert Museum outside Tucson. It helps young people of all ages understand the delicate balance between plants and animals living in the desert. If you visit, you’ll get to travel along an underground tunnel. You will learn how desert animals survive in the heat. Visitors also get to experience the thrill of spelunking through a replica of a cave found in the wild. But keep your eyes open or you’ll miss the real bats that call the cave home.

The Living Desert Museum in Palm Desert, California, has some of the world’s rarest and most exotic desert animals, including the desert “unicorn,” the Arabian oryx. This living museum’s botanical gardens represent ten major North American desert regions. Work has already begun on a new exhibit, Eagle Canyon. At this exhibit, you’ll come “face to face with the animals that rule the desert’s skies, mountains, canyons, and sands.”

The High Desert Museum in Bend, Oregon, takes you on a “walk through time” and explores the pioneer settlements of the West. The museum recreates the “legends, lore, and life of the high desert.” You can walk beside a trout stream, feed a porcupine, or learn what it was like to be part of a Paiute Indian family.

Yet it isn’t all fun and games. At the Virginia Living Museum and at some of the other museums as well, every day is “Earth Day.” Staff members encourage visitors to take an active role in doing their part to stop pollution and conserve our natural resources.

“If I had to pick just one thing people could do that would have the most effect, it would be to recycle,” says Pete Money. “It only takes three minutes a day to recycle 70 percent of the trash.”

There are other living museums found around the United States. These museums are working hard to preserve nature so future generations can walk on the wild side.

Now answer the questions about the selection.
1. What is the main goal of a living museum?

   O A. to provide people with a one-on-one experience with animals
   O B. to encourage children to touch and experience the many exhibits
   O C. to make people aware of how important plants and animals are to our survival
   O D. to provide a place where school children can go on field trips

2. How do living museums meet that goal?

   O A. They sell all kinds of nature books and posters.
   O B. They show nature films every day of the week.
   O C. They have special Saturday morning nature programs for children.
   O D. They provide people with a one-on-one experience with nature.

3. When you visit a planetarium, you will learn about

   O A. how to preserve our natural resources.
   O B. sunspots.
   O C. why plants are an important part of our ecological system.
   O D. how snakes move.

4. What is one thing people can do to help preserve our natural resources?

   O A. recycle trash
   O B. bring their friends to a living museum
   O C. go spelunking in a cave
   O D. encourage zoos to create habitats that are just right for their animals

5. Which of the following exhibits would not be found in a living museum?

   O A. a gorilla in a cage with cement floors
   O B. a “touch tank” with a variety of sea animals
   O C. a snake in its natural habitat
   O D. a planetarium
6. Designing an animal habitat takes a lot of hard detective work. Which of the following things would you do to create an animal’s habitat?

- A. grow plants that will make the animal’s exhibit look natural
- B. observe the animal in its natural environment
- C. visit zoos and living museums that exhibit the same animal
- D. all of the above

7. According to this article, plants are important to the earth’s health because

- A. they shade animals.
- B. animals eat plants.
- C. they provide oxygen.
- D. all of the above

8. The selection says that the Arabian oryx is an exotic desert animal. What does the word *exotic* mean? (page 3, paragraph 5)

- A. able to go without water
- B. common and plain
- C. rare, unusual, or foreign
- D. able to eat cactus plants

9. The museum recreates the “legends, lore, and life of the high desert.” (page 3, paragraph 6) In this sentence, the word *recreates* means

- A. refreshes one’s mind or body through play in the high desert.
- B. simulates the experiences and environment of the high desert.
- C. happens or shows up again.
- D. the quality or condition of being correct.

10. Another good title for this article is

- A. “The Life-Cycle of Bats.”
- B. “Living Museums: Where Science Comes Alive.”
- C. “Animals of the Desert.”
- D. “A Walk Through Time.”
DIRECTIONS: Read each of the following sentences. Fill in the bubble next to the verb that correctly completes the sentence.

1. The preservation of natural resources ____________ an important goal of living museums.
   - ○ is
   - ○ are

2. Plants, clean air, and sunlight ____________ our environment a healthy place in which to live.
   - ○ makes
   - ○ make

3. In the animals’ exhibits, design specialists create natural-looking habitats that ____________ real.
   - ○ looks
   - ○ look

DIRECTIONS: Read each of the following sentences. Circle the antecedent of each underlined pronoun.

4. Peregrine falcons were nearly extinct, but now they are found all over the world.

5. DDT comes in a powder or a liquid and it is a very toxic pesticide.

6. Scientists are studying fire ecology in North America to better understand its role in preserving nature.
DIRECTIONS: Read each of the following sentences. Underline the prepositional phrases found in each sentence.

7. We spotted an unknown animal scampering around the field toward the river.

8. The article in the National Geographic magazine showed colorful pictures of penguins waddling across snow-covered rocks.

DIRECTIONS: Read each of the following sentences. Underline the adjectives.

9. Rainforest canopies provide researchers many habitats and mysteries.

10. Peter gave his desert neighbors a symbolic gift of friendship.
DIRECTIONS: Read all of the sentences. If an underlined word is misspelled, fill in the bubble next to the answer you have chosen. If none of the underlined words are misspelled, fill in the bubble next to “No mistake.”

1. O A. Dale was under consideration for the ecologist of the year award for the second time.
   O B. Who remembers the algebraic equation for the area of a rectangle?
   O C. The United States is a very rich nation.
   O D. No mistake

2. O A. Peregrine falcons are noted for their strength, swiftness, and agility.
   O B. There going to take us sight seeing around Hong Kong this summer.
   O C. They’re going to check in and pick up water bottles before running the marathon.
   O D. No mistake

3. O A. The earth may experience negative consequences if we continue to burn the rainforests.
   O B. Scientists made many discoveries that have improved our quality of life.
   O C. Mosquitoes are the hosts of many deadly or debilitating diseases.
   O D. No mistake

4. O A. History students were required to read Abraham Lincoln’s three autobiographies.
   O B. Government antitrust policies and laws were established to prevent large business monopolies.
   O C. Polygraphs are used by law enforcement officers as lie detector tests.
   O D. No mistake

5. O A. Red Chinese dragons and pandas are two kinds of animals nearing extinction in China.
   O B. There was a glaring omission in the witness’ statement.
   O C. Corporate greed caused a gradual erosion of confidence in the stock market.
   O D. No mistake
6. A. The face and posture of the praying mantis gave it an unearthly appearance.  
   B. The insurance company determined that Dad’s traffic accident was unavoidable.  
   C. It was unnecessary for me to take the bus yesterday because my brother drove me to school.  
   D. No mistake

7. A. The scout troop decided hiking halfway up Mt. Rainier would be an endurable weekend trek.  
   B. Variable weather conditions in the mountains will demand we pack rain and cold weather gear.  
   C. The changable skin of the chameleon enables it to hide from predators.  
   D. No mistake

8. A. From the liquidness of the pancake batter, we knew more flour was needed.  
   B. The blistering summer sun liquifyed the frozen water faster than we thought it would.  
   C. When exposed to extremely cold temperatures, oxygen will liquify.  
   D. No mistake

9. A. The astronomer gazed through his telescope and imagined traveling to uncharted planets and galaxies.  
   B. We unknowingly wandered into an unmapped area of the cavern and became hopelessly lost.  
   C. The open range of the Wild West came to an end when cattlemen inclosed their ranches with fences.  
   D. No mistake

10. A. Scientific research must be verified by several experts before the results of an experiment are considered reliable.  
    B. The wood carver needed only a few more decorative noches to complete his sculpture.  
    C. To enhance the students’ understanding and appreciation for literature, the instructor included various genres on the summer reading log.  
    D. No mistake
PART 1 — Antonyms

**DIRECTIONS:** Read the sentence. Choose the word that means the opposite of the underlined word. Then fill in the bubble next to the word you have chosen.

1. Because our team practiced shooting goals every day last week, it was inevitable we would improve our scoring percentage.
   - A. uncertain
   - B. predicted
   - C. routine
   - D. enforced

2. Advocates of after-school programs canvassed the neighborhood to encourage people to vote for the proposition.
   - A. inspectors
   - B. candidates
   - C. opponents
   - D. supporters

3. The rate at which forests are being destroyed has accelerated with the coming of modern technology.
   - A. slowed
   - B. quickened
   - C. stabilized
   - D. improved

PART 2 — Multiple Meanings

**DIRECTIONS:** Read the sentence. Read and answer the question. Fill in the bubble next to the answer.

4. Partially digested food in the bird’s crop was used to feed the animal’s nestlings.
   
   In which sentence is the word crop used in the same way as in the sentence above?
   
   - A. Corn is an essential money crop because the grain is utilized here and shipped overseas.
   - B. The zookeeper knew that the falcon chick had been properly fed when its crop began to bulge.
   - C. The young man asked his barber to crop his hair closely so it would stay out of his eyes.
   - D. With crop in hand, the horseback rider was prepared for the jumping competition.

5. As I stood in the middle of Sequoia National Park, I was able to detect the crowns of the massive redwoods.

   In which sentence is the word crown used in the same way as in the sentence above?

   - A. Although a wild, fly ball landed on the outfielder’s crown, he still caught the ball.
   - B. Grandpa returned from his appointment and said the dentist had replaced his broken crown.
   - C. Botanists at the nursery said we should cover the sapling with straw to protect its crown during the winter months.
   - D. The crown of my coin collection is an 1889 gold piece that my father inherited from his grandfather.
PART 3 — Context Meaning

**DIRECTIONS:** Read the sentence. Using context, choose the word that means the **same** or **about the same** as the underlined word. Then fill in the bubble next to the word you have chosen.

6. A blend of cinnamon sticks, fresh nutmeg, orange slices, and cloves steeped in hot, apple cider makes a delicious drink.
   - A. soaked
   - B. ascended
   - C. dredged
   - D. synchronized

7. The rancher’s favorite pinto was a brown and tan, **mottled** pony named Spot.
   - A. camouflaged
   - B. obese
   - C. elite
   - D. blotched

PART 4 — Synonyms

**DIRECTIONS:** Read the sentence. Choose the word that means the **same**, or **about the same**, as the underlined word. Then fill in the bubble next to the word you have chosen.

8. Photographs preserve **cherished** moments in people’s lives.
   - A. treasured
   - B. eccentric
   - C. drudgery
   - D. suppressing

9. Not wanting to be **vulnerable**, the island people boarded up their houses to protect them from the hurricane’s destructive winds.
   - A. invincible
   - B. hospitable
   - C. shunned
   - D. defenseless

10. When the executive missed his appointment with the company, the **moral** he learned was to never keep others waiting.
    - A. joke
    - B. story
    - C. secret
    - D. lesson

**TOTAL SCORE:** _____/10
When most people speak about rain forests, they refer to the lush, tropical regions in the jungles near the equator. People seldom mention the dense, temperate rain forests located along the Pacific coast. This forest ranges from Alaska to Oregon. Here warm, moist air from the Pacific Ocean drops up to sixteen feet of rain in a single year.

Let us examine a few differences between temperate and tropical rain forests. Both ecosystems receive a great deal of rain. Tropical forests have rain evenly spread throughout the year. Strong shower bursts occur frequently. In contrast, temperate rain forests have lengthy wet seasons and fairly dry summers. Fog provides the necessary moisture for plants during the summer.

A tropical rain forest has three layers: the forest floor, the understory, and the canopy. It is home for well over half of the earth’s plant and animal species. The poor soil supports a wealth of vines, climbing plants, and broad-leafed evergreens. The temperate rain forest has a less complex ecology. Its cool winters limit the numbers and variety of life forms that survive there. The most common trees are evergreens.

Tropical rain forests are more fragile than temperate rain forests. However, both forests are threatened. Once they are destroyed, it will take years for these ecosystems to revive.
Passage #2

Refer to “General Directions for One-Minute Administration of Reading Passages.”

Say these specific directions to the student:
When I say “Begin,” start reading aloud at the top of this page. Read across the page (DEMONSTRATE BY POINTING). Try to read each word. If you come to a word you don’t know, I will say the word for you. Read as quickly and accurately as you can, but do not read SO fast that you make mistakes. Do your best reading.

The bison, native to North America, is also called a buffalo. The powerful male is twice the weight of the female. It measures over six feet tall at its shoulders and weighs nearly a ton. The bison’s shaggy, brown fur grows longest on the animal’s head, neck, and shoulders; a straggling beard hangs from its chin. Both male and female have short, curving horns. Despite their massive size, buffalo are agile runners, capable of sprinting up to thirty-five miles an hour.

Herds of buffalo were rapidly dying by the early 1800s. Once, the animals numbered over sixty million. People were pushing across the continent. The herds had to compete with the settlers. They were turning the animals’ grazing grounds into farmland. The westward expansion encroached upon the buffalo’s habitat. Building the railroad from the Atlantic to Pacific Ocean made the buffalo’s demise certain. Organized hunting parties killed this huge mammal for sport. People shot the animal from trains as they passed through its territory.

Some settlers were concerned. They thought the slaughter of the buffalo might also wipe out Native Americans. Bison were an important staple and their main source of protein. They used the hides for clothing, blankets, and shelter. In 1885, fewer than nine hundred buffalo remained on the plains. Cattlemen became alarmed. So people created refuges to save the animals. Today, herds number around 200,000. Hopefully, the buffalo will endure for future generations to enjoy.

<table>
<thead>
<tr>
<th>EVALUATING CODES FOR ORAL READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>sky (/) word read incorrectly</td>
</tr>
<tr>
<td>blue sky (&gt;) inserted word</td>
</tr>
<tr>
<td>( ) after the last word read</td>
</tr>
</tbody>
</table>

Comments:

<table>
<thead>
<tr>
<th>FLUENCY SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Words Read Per Minute:</td>
</tr>
<tr>
<td>Number of Errors:</td>
</tr>
<tr>
<td>Number of Words Read Correctly:</td>
</tr>
<tr>
<td>Passing Criterion (50th %ile) =</td>
</tr>
</tbody>
</table>

Errors include: 1) words read incorrectly; 2) words left out or inserted; 3) mispronounced words; 4) dropped endings or sounds; and 5) reversals. Self-corrections and word repetitions are NOT marked as errors.
Persuasive Writing Assessment Prompt

Writing Situation: You noticed that your school does not have a paper recycling program. You see this as an opportunity to save trees and make money for the Student Council. Write a letter to persuade the Student Council at their next meeting to begin a paper recycling program that is managed by students.

Audience: The Student Council

Directions for Writing: Consider the selections you read in the Ecology unit and how human activities can disrupt the balance in the ecosystem. State your position in support of a paper recycling program to save trees and maintain the balance in the ecosystem. Write a multiple 3-5 paragraph essay to explain and support your position with logical arguments. Think about the Student Council’s counter-arguments and be sure your paragraphs acknowledge the opposition and provide counter-arguments. Use supporting details and precise, descriptive vocabulary to paint a visual image in the mind of the reader. In your concluding paragraph, summarize by explaining to the Student Council what you would like them to do.

You will score the most points if you use the following checklist.

Revising for Genre: Persuasive Letter

You should:

_____ write multiple paragraphs stating a clear position regarding a paper recycling program
_____ support your position with organized and relevant evidence
_____ follow an appropriate organizational pattern in and between paragraphs
_____ anticipate, acknowledge, and address the opposition’s concerns and provide counter-arguments

Revising for Writing Strategies (Traits)

You should:

_____ use language that engages the interest of the reader and states a clear purpose
_____ develop the topic with supporting details and precise vocabulary
_____ link one paragraph to another using transitional words and phrases
_____ conclude with a detailed summary of what you want the Student Council to do

Proofreading for Conventions

You should:

_____ use correct punctuation, capitalization, and grammar
_____ use simple, compound, and complex sentence structure to express your thoughts
_____ use correct spelling

TOTAL SCORE: _____/4