Shigh School Listening Task: "City Heat: Why Urban Areas Feel Warmer"

## Teacher Script (Directions):

SAY:

Listen carefully to this informational passage. You may take notes while you listen. Then, answer the questions that follow. You will hear the passage one time. Ready, set, listen!

City Heat: Why Urban Areas Feel Warmer

If you have ever walked from a shady park into a busy downtown street on a summer afternoon, you may have noticed that the city feels several degrees hotter. This difference is not just in your imagination. Many urban areas experience what scientists call the urban heat island effect.

In a natural landscape, much of the ground is covered by soil, plants, and trees. These surfaces absorb some heat during the day but also release moisture into the air, which helps keep temperatures lower. In contrast, city surfaces are often made of concrete, brick, and asphalt. These dark, dense materials soak up sunlight and store heat. Even after the sun sets, sidewalks and buildings continue to release warmth, which keeps nighttime temperatures higher than in nearby rural areas.

Human activity adds to the problem. Cars, buses, and air conditioners all release heat into the air. In many cities, tall buildings also block breezes that would normally help move warm air away. As a result, people who live in dense city neighborhoods may face higher temperatures, especially during heat waves.

City planners and scientists are studying ways to reduce the urban heat island effect, such as planting more trees, installing green roofs, and using lighter-colored materials that reflect rather than absorb sunlight.

(That's ~230 words; you can adjust later if needed.)

Question 1 – Central Idea (Pillar 1 – Understand the Message)

Q1. What is the central idea of the passage?

- A. City temperatures change mostly because people prefer to spend time downtown instead of in rural areas.
- B. Cities feel hotter than nearby rural areas due to the urban heat island effect, which is influenced by surfaces, human activity, and limited airflow.
- C. Rural areas stay cooler than cities because they have fewer cars and taller trees all year long.
- D. Scientists disagree about whether cities are truly warmer than rural areas, so more research is needed.

Question 2 – Detail / Cause–Effect (Pillar 1 + 3 – Message & Use)

- Q2. According to the passage, which factor MOST contributes to higher nighttime temperatures in cities compared with nearby rural areas?
- A. City residents often stay awake later at night than people in rural communities.
- B. Concrete, brick, and asphalt surfaces store heat during the day and release it after sunset.

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- C. Trees in rural areas stop releasing moisture into the air once the sun goes down.
- D. Air conditioners shut off in rural areas, so less heat is released there at night.

Question 3 – Vocabulary in Context: "dense" (Pillar 2 – Understand the Language)

## From the passage:

- > "In contrast, city surfaces are often made of concrete, brick, and asphalt. These dark, dense materials soak up sunlight and store heat."
  - Q3. In the sentence above, what does the word \*dense\* MOST nearly mean?
- A. Confusing and difficult to understand
- B. Crowded together and solid in structure
- C. Packed with people and traffic
- D. Heavy and impossible to move

Question 4 – Purpose of the Last Paragraph (Pillar 3 – Use the Information)

Last paragraph gist: planners/scientists studying ways to reduce urban heat island effect (trees, green roofs, lighter colors).

- Q4. What is the MAIN purpose of the last portion of the passage?
- A. To argue that cities should remove concrete and asphalt and replace them entirely with parks
- B. To explain why scientists cannot agree on any solutions to the urban heat island effect
- C. To describe several strategies that could help lower temperatures in city areas affected by the urban heat island effect
- D. To warn readers that living in cities during heat waves is always dangerous and should be avoided

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Question 5 – Inference / "Most Likely True" (Pillar 3 – Use the Information)

Q5. Based on the passage, which statement is MOST likely true?

- A. Planting more trees and adding green roofs can help reduce the impact of the urban heat island effect in some city neighborhoods.
- B. Rural areas never experience high temperatures because they do not have concrete or asphalt surfaces.
- C. The urban heat island effect only occurs in cities that already have very little traffic and very few tall buildings.
- D. People who live in rural areas are not affected by heat waves, even when city temperatures rise.

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- \* Q1 Central idea → Pillar 1 (Message)
- \* Q2 Detail / cause–effect → Pillar 1 (Message) + Pillar 3 (Use)
- \* Q3 Vocabulary ("dense") → Pillar 2 (Language)
- \* Q4 Purpose  $\rightarrow$  Pillar 3 (Use)
- \* Q5 Inference / "most likely true" → Pillar 3 (Use)

So when we get to Segment 5, you can say something like: