

Hot Streets, Clear Evidence

Analyze how an explanatory model uses focused evidence.

9-10W2b “Develop a topic with well-chosen relevant and sufficient facts, definitions, concrete details, quotations and paraphrased information or other examples appropriate to the audience's knowledge of the topic. Include formatting, graphics...”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the sentence that tells what a heat island is. Circle two details that explain why one block may be hotter than another, then number the two places where outside sources inform the writer's point, 1 and 2.

Why City Blocks Stay Hot

- ① On a July afternoon, a shaded park can feel noticeably cooler than the block beside it. The U.S. Environmental Protection Agency describes heat islands as “urbanized areas that experience higher temperatures than outlying areas.” Roofs, streets, and parking lots absorb sunlight, then release stored heat after sunset. In Phoenix, where summer heat is routine, that extra warmth affects people who wait for buses, walk home, or live in apartments without reliable air conditioning. The pattern is not simply uncomfortable. It can raise energy use and make hot nights harder for bodies to recover from daytime heat.
- ② **Why Surfaces Matter** Dark pavement may reach far higher surface temperatures than grass in the same sun. Because pavement is waterproof, rain runs into storm drains instead of evaporating slowly and cooling the area. Trees change both conditions: their leaves block sunlight, and water released from leaves cools the surrounding air. These details show why a temperature difference can vary from one block to the next. They also help city planners choose actions that fit a particular street, rather than assuming every neighborhood needs the same solution.
- ③ Evidence also guides decisions about whom to protect first. The Centers for Disease Control and Prevention warns that older adults, infants and children, and people with chronic health conditions face greater risk during extreme heat. A city could use this information to place cooling centers near senior housing and to add shade at bus stops used by students. It could also compare electricity demand before and after a tree-planting project. Together, information about health risks, local observations, and measurable results give residents reasons to support a plan, not just a promise.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What does the EPA quotation help the reader understand about heat islands?

2 Identify two details from the passage that explain why a paved block can be warmer than a grassy area.

3 What information does the CDC provide, and how does the writer use it to suggest city actions?

4 How does the bold heading **Why Surfaces Matter** help organize the passage for a reader?

3 YOUR TURN _____ Your own words

Choose a school or community issue you can explain accurately. Write one 80-100-word explanatory paragraph with a bold heading, a one-sentence definition, two concrete relevant details, and either a short quotation or a paraphrased fact from a named reliable source. Make clear why the details matter to your audience.

PART 1 • READ AND MARK

Underline the sentence that tells what a heat island is. Circle two details that explain why one block may be hotter than another, then number the two places where outside sources inform the writer's point, 1 and 2. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What does the EPA quotation help the reader understand about heat islands?	It explains that heat islands are urbanized areas with higher temperatures than nearby outlying areas.
2	Identify two details from the passage that explain why a paved block can be warmer than a grassy area.	Dark pavement can reach much higher surface temperatures than grass, and waterproof pavement sends rain into drains instead of allowing evaporation to cool the area.
3	What information does the CDC provide, and how does the writer use it to suggest city actions?	The CDC identifies older adults, infants and children, and people with chronic health conditions as facing greater risk during extreme heat. The writer uses that information to suggest cooling centers near senior housing and shade at bus stops used by students.
4	How does the bold heading Why Surfaces Matter help organize the passage for a reader?	It signals that the next section explains how pavement, rain, and trees affect temperatures, helping readers locate the explanation of causes.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Reducing Cafeteria Waste Food waste is edible food that is discarded instead of eaten. The U.S. Environmental Protection Agency reports that food was the largest material category in U.S. municipal solid-waste landfills in 2018. At our school, students could take fruit from a share table instead of throwing unopened items away. The cafeteria could also measure discarded food for one week before and after changing portion choices. Those results would show whether the new system reduces waste and gives staff evidence for deciding whether to continue it.

Accept equivalent explanations that accurately connect the selected evidence to the writer's purpose. For the open response, accept varied topics if the definition, details, named source information, and audience-focused explanation are accurate and relevant.