Evidence Under Heat

Use several sources to make a careful planning claim.

CCSS.ELA-Literacy.W.9-10.9 "Draw evidence from literary or informational texts to support analysis, reflection, and research."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline claims or proposed actions in the passage. Circle details that support those ideas, and number the different sources of evidence planners use.

Planning for Hotter Streets

1 On a July afternoon, city blocks can be much hotter than nearby parks. This pattern, called the urban heat island effect, occurs because dark roofs and pavement absorb sunlight and release heat slowly. Trees can lower surface and air temperatures by shading pavement and cooling the air as water evaporates from leaves. The U.S. Environmental Protection Agency reports that daytime temperatures in urban areas can be 1 to 7°F higher than temperatures in outlying areas. Heat can be especially dangerous for older adults, young children, and people who work outdoors.

2 In one neighborhood planning effort, staff members did not assume that every block needed the same response. They compared tree-canopy maps, which show where tree cover exists, with records of heat-related emergency calls. They also walked streets to note bus stops, apartment buildings, and wide paved areas. This evidence helped them identify questions for further study, such as whether residents had shade while waiting for buses or could reach a cooling center. Maps and call records revealed patterns, but they could not explain every resident's experience.

3 To plan a response, the staff met with residents and asked about hot routes, housing conditions, and access to air conditioning. Residents reported that some bus stops lacked shade and that upper-floor apartments stayed warm at night. The staff used these accounts alongside maps, call records, and street observations when considering possible actions. They could add shade structures at stops, plant and maintain trees, or extend cooling-center hours. Rather than treating one source as final proof, planners combined evidence and noted what additional information they still needed.

2 ANSWER WITH EVIDENCE

Use the passage

1. Write a claim about how trees may affect urban heat. Cite two details from paragraph 1 that support your claim.

2. What did comparing tree-canopy maps with heat-related emergency-call records help planners do? What could those sources not do?

3. Why were resident accounts important alongside maps and call records? Use one detail from the passage in your explanation.

4. Which possible action is supported for further consideration by both street observations and resident reports? Explain how each source supports investigating that action.

3 YOUR TURN

Your own words

Write a 75 to 100 word recommendation for one action the city should investigate. Use at least two details from the passage, explain how each detail supports your recommendation, and name one piece of additional information planners should collect before deciding.

ANSWER KEY

Evidence Under Heat

HIGH SCHOOL · W.9-10.9

PART 1 · READ AND MARK

Underline claims or proposed actions in the passage. Circle details that support those ideas, and number the different sources of evidence planners use. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Write a claim about how trees may affect urban heat. Cite two details from paragraph 1 that support your claim.	**Trees may reduce urban heat because they shade pavement and cool the air as water evaporates from leaves.**
2	What did comparing tree-canopy maps with heat-related emergency-call records help planners do? What could those sources not do?	**The comparison helped planners identify questions for further study. The maps and call records could not explain every resident's experience.**
3	Why were resident accounts important alongside maps and call records? Use one detail from the passage in your explanation.	**Resident accounts gave information that maps and call records could not provide, such as reports that some bus stops lacked shade or that upper-floor apartments stayed warm at night.**
4	Which possible action is supported for further consideration by both street observations and resident reports? Explain how each source supports investigating that action.	**Adding shade structures at bus stops is supported for further consideration. Staff observed bus stops during street walks, and residents reported that some bus stops lacked shade.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I recommend that the city study longer cooling-center hours before making a final decision. Heat-related emergency-call records may show when heat creates urgent health risks, while residents' reports about warm upper-floor apartments suggest that nighttime heat can remain a problem indoors. Together, these sources support investigating whether current cooling centers are open when residents need them. Before changing hours, planners should collect information about center attendance, transportation options, and the times when residents are most likely to seek relief.

Accept accurate claims and recommendations that use passage evidence and explain the connection between evidence and reasoning. For the open task, accept varied actions if the response includes at least two relevant details and a reasonable need for further research.