

Heat Clues Fast

Use headings and text structures to locate useful evidence before close reading.

12.P.EICC.3.b “Scan and skim the text, making note of structures and sections that might be most useful. (I)”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB First skim the three bold section headings. In the margin beside each paragraph, write a 3- to 5-word note about information you expect to find there. Then scan each section for one useful detail and circle it. Check whether the detail supports or changes your note.

Reducing Urban Heat Exposure

- ① **Mapping the Heat:** On a July afternoon, temperatures can vary sharply within the same city. To locate the hottest blocks, researchers attach sensors to bicycles or cars and record air temperature along repeated routes. They pair those readings with satellite images showing tree canopy, pavement, and roof materials. A map may reveal a cooler park beside a much warmer commercial corridor, but one reading does not establish a pattern. Researchers repeat measurements at similar times and compare them with data from fixed weather stations. This mapping section helps readers judge where heat is concentrated and how confidently the pattern was measured.
- ② **Cooling Mechanisms:** Trees can reduce heat exposure in more than one way. Their leaves block incoming solar radiation, so shaded sidewalks and walls absorb less energy. Water released through leaves can also cool nearby air as it evaporates, although the amount depends on soil moisture, species, and local weather. Reflective roofs work differently. By sending a larger share of sunlight back into the atmosphere, they can keep roof surfaces cooler and reduce heat entering a building. Neither strategy produces identical results everywhere: a young tree provides limited shade, and a bright roof may offer little relief to a pedestrian several blocks away.

- ③ **Planning Trade-Offs:** A city cannot treat every hot location with the same intervention. Planting trees requires space for roots, years of maintenance, and reliable water during establishment. It can improve shade along bus stops, playgrounds, and walking routes. Reflective roofs can be installed during building repairs and may lower cooling demand indoors, yet they depend on owners' participation and do not create public shade. Planners therefore combine temperature maps with information about residents, land use, budgets, and health risks. A proposal that favors one measure should state which problem it addresses, identify what evidence supports the choice, and acknowledge a limitation.

2 ANSWER WITH EVIDENCE _____ Use the passage

- ① You need evidence about whether a city heat pattern was measured reliably. Which section would you skim first? Cite one detail that makes it useful.

- ② Which section is most useful for explaining why a reflective roof can cool a building? What cause-and-effect relationship in that section gives the explanation?

- ③ A nonprofit is choosing projects to increase shade at bus stops. Which two sections should it consult first, and what distinct information would each provide?

- 4** A reader wants to compare what tree planting and reflective roofs can and cannot do. Which section offers the most direct comparison? Give one contrast it includes.

3 YOUR TURN _____ Your own words

Imagine you must recommend one heat-reduction step for a bus-stop corridor. Create a skim plan using all three subheadings: list the order you would consult them and the specific information you would seek from each, then write one sentence explaining why this plan prevents a weak recommendation.

Plan a purposeful second pass

Use the three bold headings to order your reading. Name the information you would seek from each section and explain how combining those kinds of evidence prevents a weak recommendation.

[illegible]

PART 1 • READ AND MARK

First skim the three bold section headings. In the margin beside each paragraph, write a 3- to 5-word note about information you expect to find there. Then scan each section for one useful detail and circle it. Check whether the detail supports or changes your note. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	You need evidence about whether a city heat pattern was measured reliably. Which section would you skim first? Cite one detail that makes it useful.	"Mapping the Heat." It says researchers repeat measurements at similar times and compare them with data from fixed weather stations.
2	Which section is most useful for explaining why a reflective roof can cool a building? What cause-and-effect relationship in that section gives the explanation?	"Cooling Mechanisms." Reflective roofs send more sunlight back into the atmosphere, which keeps roof surfaces cooler and reduces heat entering a building.
3	A nonprofit is choosing projects to increase shade at bus stops. Which two sections should it consult first, and what distinct information would each provide?	"Mapping the Heat" would identify hot locations and the strength of the temperature evidence. "Planning Trade-Offs" would provide information about tree shade at bus stops and the space, water, and maintenance required.
4	A reader wants to compare what tree planting and reflective roofs can and cannot do. Which section offers the most direct comparison? Give one contrast it includes.	"Cooling Mechanisms." Trees can create shade and cool nearby air through evaporation, while reflective roofs cool roof surfaces and buildings but may not directly help pedestrians.

PART 3 · YOUR TURN (SAMPLE ANSWER)

1. I would start with “Mapping the Heat” to locate the corridor and check whether the measurements are reliable. 2. Next, I would skim “Planning Trade-Offs” for tree space, water, and maintenance needs at bus stops. 3. Last, I would consult “Cooling Mechanisms” to explain why shade could reduce heat exposure. This plan connects location, feasibility, and scientific rationale instead of choosing an action from only one kind of evidence.

Accept equivalent section choices when the student gives a passage-based reason that fits the stated purpose. For the open task, look for all three sections, a logical order, specific information to seek, and a rationale connecting multiple kinds of evidence. The bold run-in headings are section labels; the colon separates each label from the first sentence. Students first skim the labels, then scan the text to test their notes. This is a planning task, not a requirement to collect local measurements or implement a project. General mechanisms: EPA, Benefits of Trees and Vegetation; Measuring Heat Islands; Using Cool Roofs to Reduce Heat Islands (<https://www.epa.gov/heatislands/using-cool-roofs-reduce-heat-islands>). Roof cooling is not the same as creating shade at a bus stop.