Heat Map Hunt

Use headings and key terms to locate useful information.

10.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 Circle each section heading. Then underline one sentence in each section that tells you what kind of information you can find there.

Heat in the City

1 WHERE HEAT BUILDS Cities can be warmer than nearby rural areas, an effect called the urban heat island. Asphalt streets, dark roofs, and parking lots absorb sunlight during the day and release heat after sunset. Buildings can also block breezes that would cool pedestrians. On a hot evening, a city neighborhood may stay several degrees warmer than a park outside town. This extra heat matters because it raises cooling costs and can make heat waves more dangerous, especially for older adults, young children, and people who work outdoors.

2 MEASURING THE DIFFERENCE Researchers compare air temperatures at several locations, often using sensors placed in shaded spots. They also study surface temperatures with satellite images, which can reveal extremely hot rooftops and pavement. A single reading does not explain a neighborhood, so scientists collect measurements at different times of day and across seasons. Maps made from these data help city planners identify blocks where residents have few trees, little shade, or limited access to places that stay cool during emergencies. The same maps can guide inspections after an unusually hot week.

3 COOLING OPTIONS Cities use several approaches to reduce heat, but each works best in particular places. Planting street trees can shade sidewalks and cool the air through evapotranspiration, the release of water vapor from leaves. Cool roofs are coated with light-colored materials that reflect more sunlight than dark roofing. Some schools and community centers open cooling rooms during severe heat, giving residents a safe place to rest. A planner deciding where to invest would need the measurement maps first, then would compare each option with local needs.

2 ANSWER WITH EVIDENCE

Use the passage

1. You need a quick explanation of why a neighborhood stays hot after sunset. Which labeled section would you read first, and what topic in that section makes it useful?

2. A planner wants evidence to identify blocks with little shade. Which section should the planner skim, and what source of information named there could help?

3. What can a skimmer expect to find quickly by reading the final section, based on its heading and first sentence?

4. To find information about temporary safe places during severe heat, what phrase would you scan for, and what does the passage say about it?

3 YOUR TURN

Your own words

Imagine you are creating a heat-safety display for a public library. Write a three-step reading plan that names two sections you would consult in order, explains the information you would seek in each, and includes one passage detail you would use.

ANSWER KEY

Heat Map Hunt

GRADE 10 · 10.P.EICC.3.b

PART 1 · READ AND MARK

Circle each section heading. Then underline one sentence in each section that tells you what kind of information you can find there. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	You need a quick explanation of why a neighborhood stays hot after sunset. Which labeled section would you read first, and what topic in that section makes it useful?	**WHERE HEAT BUILDS. It explains that asphalt, dark roofs, and parking lots absorb sunlight and release heat after sunset.**
2	A planner wants evidence to identify blocks with little shade. Which section should the planner skim, and what source of information named there could help?	**MEASURING THE DIFFERENCE. Satellite images and maps made from temperature data could help identify those blocks.**
3	What can a skimmer expect to find quickly by reading the final section, based on its heading and first sentence?	**Ways cities can reduce heat and information about where different approaches may work best.**
4	To find information about temporary safe places during severe heat, what phrase would you scan for, and what does the passage say about it?	**Scan for "cooling rooms." Schools and community centers may open them so residents have a safe place to rest.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

First, I would scan WHERE HEAT BUILDS to find who faces greater danger and why evenings can remain hot. Next, I would read COOLING OPTIONS to locate places that can offer relief. I would include the detail that schools and community centers can open cooling rooms during severe heat.

Accept equivalent section names and accurate explanations of why a section is useful for the stated purpose. For the open task, look for an ordered use of two headings, a clear purpose for each, and one accurate supporting detail.