

Heat Map Hunt

Use headings and structures to locate useful information quickly.

9.P.EICC.3.b “Scan and skim the text, making note of structures and sections that might be most useful. (1)”

NAME _____

DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle each all-caps section label and underline one sentence in each section that tells what the section helps a reader understand. Use your marks to choose a useful section before you read every word.

Mapping a Hotter City

- ① **THE PATTERN** On a sunny summer afternoon, pavement, rooftops, and sparse shade can make one city block much hotter than another. This urban heat island effect occurs because dark, built surfaces absorb solar energy and release heat slowly. To locate the hottest places, city planners may combine satellite images with temperature readings collected at street level. A map of these readings can reveal hot spots near wide roads, large parking lots, or neighborhoods with few trees. The map does not explain every cause, but it helps planners decide where to investigate first.
- ② **THE EVIDENCE** When comparing locations, planners look for repeated patterns rather than one unusual reading. A shaded bus stop may be cooler than an unshaded stop nearby, yet wind, cloud cover, and the time of day also affect air temperature. Therefore, teams often measure many sites during the same time period and record surface type, tree cover, and nearby buildings. They can then compare a heat map with a tree-canopy map. If the hottest areas also have little canopy, the comparison suggests a useful connection, though it does not prove that trees alone caused the difference.
- ③ **THE RESPONSE** Heat maps can guide choices, but a map is only a starting point. In one neighborhood, a city might add shade at a playground, plant street trees where they can survive, or use lighter paving during a scheduled repair. Residents can also point out places the map missed, such as a crowded transit stop used after school. Because cooling projects cost money and take time, planners use the maps to rank needs and check results later. A follow-up map, made under similar weather conditions, can show whether a project reduced local heat or whether another strategy is needed.

2 ANSWER WITH EVIDENCE _____ Use the passage

- 1** Without reading every sentence, which section would you skim to find why planners create a heat map? Give one detail from that section that supports your choice.

- 2** Which section would you skim to judge whether tree cover and heat may be connected? What two kinds of maps does that section compare?

- 3** What text structure is most visible in THE EVIDENCE: problem and solution, sequence, or comparison? Cite a phrase that shows this structure.

- 4** A reader wants to find both possible cooling actions and a way to check whether they worked. Which section is most useful, and what later tool does it name?

3 YOUR TURN _____ Your own words

Imagine you are preparing a one-minute report titled "How a City Should Use Heat Maps." Write a three-item preview note that names each passage section and explains why you would read it, then add one sentence naming the section you would study most closely and why.

PART 1 • READ AND MARK

Circle each all-caps section label and underline one sentence in each section that tells what the section helps a reader understand. Use your marks to choose a useful section before you read every word. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Without reading every sentence, which section would you skim to find why planners create a heat map? Give one detail from that section that supports your choice.	THE PATTERN. It says that a map helps planners decide where to investigate first.
2	Which section would you skim to judge whether tree cover and heat may be connected? What two kinds of maps does that section compare?	THE EVIDENCE. It compares a heat map with a tree-canopy map.
3	What text structure is most visible in THE EVIDENCE: problem and solution, sequence, or comparison? Cite a phrase that shows this structure.	Comparison. The section says teams can "compare a heat map with a tree-canopy map."
4	A reader wants to find both possible cooling actions and a way to check whether they worked. Which section is most useful, and what later tool does it name?	THE RESPONSE. It names a follow-up map made under similar weather conditions.

PART 3 • YOUR TURN (SAMPLE ANSWER)

I would preview THE PATTERN to learn what heat maps show and where hot spots may occur. Next, I would read THE EVIDENCE to see how planners compare repeated measurements and maps. Then, I would scan THE RESPONSE for actions and ways to check results. I would study THE EVIDENCE most closely because a report needs reliable support before recommending a project.

Accept equivalent explanations when students correctly connect each section label to its purpose in the passage. For the open task, accept a different order if the student gives a logical reason for each section and identifies one section for closer study.