Heat Research Files

Organize evidence from different sources before drawing a conclusion.

8.R.1.B "Collect, organize, and synthesize information from multiple sources using various notetaking formats."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the name or type of each source, circle one detail Maya collected from that source, and number the three note-taking formats she used so you can see how her evidence is organized.

Maya Studies City Heat

1. On a hot July afternoon, Maya investigated why some blocks in her city felt much hotter than others. She began with an online map from the city planning department, which showed surface temperatures measured by satellite. Blocks with wide parking lots appeared warmer than nearby blocks with mature trees. Maya copied the map's date, the neighborhood names, and two temperature patterns into a two-column chart. In one column, she recorded observations. In the other, she wrote questions, including whether pavement alone explained the difference.

2. Next, Maya read a university extension article about shade and heat. The article explained that tree canopies block sunlight from pavement and buildings, helping those surfaces stay cooler. It also warned that shade is not the only factor, because building materials, traffic, and access to air conditioning can affect heat exposure. Maya used a cause-and-effect web for this source. She placed "heat exposure" in the center, drew branches for possible causes, and added the article's warning beside the branch labeled trees.

3. Finally, Maya interviewed a neighborhood health worker, who described residents waiting at bus stops with little shade. The worker said that older adults and young children may face greater risk during extreme heat, especially when they must spend time outdoors. Maya wrote the worker's claim on an interview note card and marked it as firsthand local experience, not a measurement. Comparing all three sources, she concluded that planting trees could help cool some public spaces, but a complete heat plan should also improve shaded bus stops and reduce heat trapped by pavement.

2 ANSWER WITH EVIDENCE

Use the passage

1. Match each source to Maya's note-taking format: the city planning map, the university extension article, and the health worker interview. What feature of the information made each format useful?

2. Sort these details by source: blocks with wide parking lots appeared warmer, several factors can affect heat exposure, and bus stops had little shade.

3. Why did Maya label the health worker's statement as firsthand local experience instead of a measurement?

4. What conclusion did Maya make from all three sources? Include two pieces of evidence that support it.

3 YOUR TURN

Your own words

Create a three-source note organizer. For each source, list one key detail and one way it affects a city heat plan, then write a two-sentence proposal for the city.

SOURCE	KEY DETAIL	EFFECT ON CITY HEAT PLAN

ANSWER KEY

Heat Research Files

GRADE 8 · 8.R.1.B

PART 1 · READ AND MARK

Underline the name or type of each source, circle one detail Maya collected from that source, and number the three note-taking formats she used so you can see how her evidence is organized. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Match each source to Maya's note-taking format: the city planning map, the university extension article, and the health worker interview. What feature of the information made each format useful?	**City planning map: two-column chart for observations and questions. Extension article: cause-and-effect web for factors affecting heat exposure. Health worker interview: note card for a firsthand local claim, labeled as not a measurement.**
2	Sort these details by source: blocks with wide parking lots appeared warmer, several factors can affect heat exposure, and bus stops had little shade.	**City planning map: blocks with wide parking lots appeared warmer. Extension article: several factors can affect heat exposure. Health worker interview: bus stops had little shade.**
3	Why did Maya label the health worker's statement as firsthand local experience instead of a measurement?	**The worker described local residents and bus stops, but did not provide measured data.**
4	What conclusion did Maya make from all three sources? Include two pieces of evidence that support it.	**Maya concluded that trees could cool some public spaces, but a complete heat plan should also add shade at bus stops and reduce heat trapped by pavement. Supporting evidence includes cooler tree-filled blocks than wide parking lots, the article's statement that shade cools surfaces but is not the only factor, and the interview detail about unshaded bus stops.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

City planning map: Wide parking lots appeared warmer than blocks with mature trees. Plan use: Add trees near paved public areas. University extension article: Shade cools surfaces, but other factors also affect heat exposure. Plan use: Pair trees with other heat protections. Health worker interview: Residents waited at bus stops with little shade. Plan use: Prioritize shade at bus stops. The city should plant trees near hot paved areas and add shade at bus stops. It should also address pavement and other conditions because trees alone will not solve every heat risk.

Accept equivalent source details when students accurately identify where each detail came from. For the open task, accept any clear organizer that includes evidence from all three sources, connects each detail to a plan, and gives a two-sentence proposal that synthesizes the evidence.