Where Heat Hides

Find the main ideas behind a city heat problem.

11.2.R.1 "Students will summarize the main ideas and paraphrase significant parts of increasingly complex texts."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the main idea of each paragraph, circle two details that explain or qualify an idea, and number the underlined ideas in the order you would use them in a summary.

Heat on the Block

1 At noon in many cities, a sidewalk can feel hotter than a nearby lawn even when both sit under the same sky. Asphalt and dark roofing absorb sunlight and later release heat, while plants cool their surroundings as water evaporates from leaves. Buildings and pavement also leave less open soil to hold moisture. This pattern, called the urban heat island effect, does not mean every block reaches the same temperature. A street shaded by mature trees may feel different from an exposed bus stop only a few blocks away. The practical question is not simply how hot a city is, but where people encounter its heat.

2 To make those differences visible, some communities measure temperatures along walking routes rather than relying only on a reading from an airport weather station. Volunteers can carry sensors past playgrounds, bus stops, and parking lots at several times of day. Their measurements help reveal which routes offer relief and which expose people waiting outside. Yet a temperature map is not a complete account of risk: the same hot stretch may matter more where residents must walk to work or have no shaded place to wait. Pairing measurements with local knowledge turns a collection of numbers into a guide for action.

3 Solutions work on different schedules. A temporary canopy can shade a crowded stop immediately, while a newly planted tree may take years to spread enough branches to do the same job. Light-colored roofs can reflect more sunlight than dark ones, but changing a roof will not shade the person standing on the pavement below. Cities also have to keep trees alive through dry spells and protect space for their roots. Choosing a response therefore requires more than finding the hottest spot. It means asking who uses that place, what relief they need now, and who will maintain longer-term changes.

2 ANSWER WITH EVIDENCE

Use the passage

1. In your own words, summarize the contrast in paragraph 1 between citywide heat and the heat people experience on particular blocks.

2. Paraphrase why the passage recommends adding local knowledge to temperature measurements.

3. In your own words, explain how a temporary canopy and a newly planted tree differ as solutions.

4. Summarize the decision-making principle at the end of paragraph 3.

3 YOUR TURN

Your own words

Write a 75 to 95 word briefing for organizers planning a summer event on a paved schoolyard. Paraphrase two significant ideas from different paragraphs, then explain what organizers should do for both this summer and future summers. Use your own words and do not quote the passage.

ANSWER KEY

Where Heat Hides

GRADE 11 · 11.2.R.1

PART 1 · READ AND MARK

Underline the main idea of each paragraph, circle two details that explain or qualify an idea, and number the underlined ideas in the order you would use them in a summary. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	In your own words, summarize the contrast in paragraph 1 between citywide heat and the heat people experience on particular blocks.	**A city may have an overall heat problem, but shade, pavement, and plants make exposure differ from one block to another.**
2	Paraphrase why the passage recommends adding local knowledge to temperature measurements.	**Measurements show where it is hot, while local knowledge shows who must use those places and where people lack relief.**
3	In your own words, explain how a temporary canopy and a newly planted tree differ as solutions.	**A canopy can provide shade right away. A new tree needs years to grow enough to provide similar shade.**
4	Summarize the decision-making principle at the end of paragraph 3.	**A useful response considers who uses a hot place, what will help immediately, and how lasting changes will be maintained.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

For this summer's schoolyard event, organizers should pay attention to where people will actually stand, not just the day's reported temperature. Dark pavement may hold heat, and a nearby shaded area can feel different from an exposed waiting line. A temporary canopy could protect guests now, especially if local families identify the busiest spots. For future events, planting trees could provide lasting shade, but organizers would need to care for them while they grow. Combining local observations with immediate and long-term choices would make the plan more useful.

Accept accurate paraphrases that preserve the passage's distinctions without repeating its wording. For the briefing, check the word count and look for two ideas from different paragraphs plus actions for both time frames.