From Heat to Action

Trace how an informational analysis moves from a problem to a policy choice.

12.RI.3.B "Analyze how the author organizes an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Number the passage's three major stages, then underline words or phrases that show how one stage leads to the next. These marks will help you trace the order and connections among the ideas.

Can Trees Cool a City?

(1) On hot summer afternoons, city neighborhoods can remain warmer than nearby rural areas long after sunset. Dark roofs and pavement absorb solar energy, while sparse vegetation provides little shade or evaporative cooling. This urban heat island effect is not distributed evenly: blocks with fewer trees often have higher surface temperatures and residents who face greater heat risk. To examine one practical response, researchers first ask whether planting trees can cool streets, then consider the limits of that solution. The question matters because extreme heat can strain power grids, worsen some health conditions, and make outdoor work more dangerous.

(2) Evidence supports the first part of that inquiry, but it also explains why location matters. Tree canopies block some sunlight before it reaches sidewalks and buildings, and leaves release water vapor that can lower nearby air temperatures. Yet a newly planted sapling offers far less shade than a mature canopy, so cooling benefits arrive gradually. Researchers therefore compare canopy cover, pavement, building density, and local weather rather than treating every tree as identical. This method connects the broad claim, that trees can reduce heat, to a more precise claim: the size, placement, and survival of trees determine how much cooling a neighborhood receives.

(3) That precision changes how cities should act. A plan that counts seedlings alone may look successful on paper while leaving the hottest bus stops and apartment corridors unchanged for years. For that reason, planners can begin by mapping heat exposure and existing shade, then prioritize places where residents lack cooling options. They must also budget for watering, soil space, pruning, and community input, because a dead or poorly placed tree cannot deliver the promised benefit. The analysis thus moves from a citywide problem, to a mechanism and evidence, to a decision framework. Each stage narrows the earlier idea and turns it into a testable public policy choice.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does the first paragraph introduce the analysis, and why does the author include the effects of extreme heat at the end of that paragraph?

2. How does the second paragraph develop the initial question about trees? Use two types of details the author adds.

3. What connection does the phrase “That precision changes how cities should act” create between the second and third paragraphs?

4. Why does the author place the discussion of mapping, maintenance, and community input after the evidence about canopy cover and tree survival?

3 YOUR TURN

Your own words

Write exactly three sentences analyzing the passage's organization. Explain the sequence of the major stages, identify how a transition connects two stages, and explain how the final stage turns the earlier analysis into a policy choice.

ANSWER KEY

From Heat to Action

GRADE 12 · 12.RI.3.B

PART 1 · READ AND MARK

Number the passage's three major stages, then underline words or phrases that show how one stage leads to the next. These marks will help you trace the order and connections among the ideas. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does the first paragraph introduce the analysis, and why does the author include the effects of extreme heat at the end of that paragraph?	**It introduces unequal urban heat and frames tree planting as a possible response. The effects of extreme heat establish why the question has practical importance.**
2	How does the second paragraph develop the initial question about trees? Use two types of details the author adds.	**It explains cooling mechanisms, including shade and water vapor from leaves, and adds limits by comparing young trees with mature canopies and considering location-related factors.**
3	What connection does the phrase "That precision changes how cities should act" create between the second and third paragraphs?	**It connects the more specific evidence about which trees cool neighborhoods effectively to the policy decisions cities should make.**
4	Why does the author place the discussion of mapping, maintenance, and community input after the evidence about canopy cover and tree survival?	**Those actions apply the earlier evidence. The author first establishes what affects cooling, then shows how planners can use that knowledge.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

The author begins with unequal urban heat and frames tree planting as a question, then explains the cooling mechanism while qualifying it with factors that affect results. The shift from "Evidence supports" to "That precision changes" carries the reader from a general possibility to evidence-based limits and then to planning. By ending with mapping, maintenance, and prioritization, the author shows that the earlier analysis is meant to guide a concrete policy decision.

Accept equivalent descriptions of the passage's progression from problem, to evidence and qualification, to policy application. For the open response, require three sentences that address sequence, a specific connection or transition, and the purpose of the final stage.