Who Gets Shade?

Analyze the causes, effects, and possible responses to unequal heat exposure.

S.9.7 "Analyze a social issue."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two causes of unequal heat exposure, circle two groups affected, and number the two proposed responses 1 and 2. Use your marks to trace how street conditions shape the choices people have.

Waiting in the Heat

1 At a bus stop in the imagined city of Riverton, two neighbors wait for the same route on opposite sides of town. One stands beneath mature trees; the other faces bare pavement in direct sun. Shade can lower the heat people feel, even when the air temperature is the same. Hot pavement and nearby buildings can add to discomfort. Riders who cannot drive may have no choice but to wait there. For older adults and people with certain health conditions, extreme heat can pose serious health risks.

2 Why do the stops differ? In Riverton, the older, shadier neighborhood has wide planting strips and a long history of tree care. Across town, narrow sidewalks leave little room for roots, and past street projects did not include shade. These choices shape who faces heat: riders on the bare route, including students traveling home and workers on late shifts, spend time in direct sun. Some can change travel times, but a worker whose shift ends at noon cannot. The problem is not simply personal preference; street design and transit schedules limit people's options.

3 Residents propose two responses. Planting street trees near the bare route could provide shade for many years, but trees need space, water, and maintenance before they grow large enough to help. Shaded bus shelters could protect riders sooner at selected stops, but they would not cool the walk to those stops, and the city cannot install them everywhere at once. A transit rider asks for shelters first, while a neighborhood gardener favors trees for wider benefits. City officials must decide which stops face the greatest exposure and how to pay for upkeep without shifting funds away from other essential services.

2 ANSWER WITH EVIDENCE

Use the passage

1. How did two past or physical conditions help create different heat exposure at Riverton's bus stops?

2. Why might heat at the bare stop be harder for some riders to avoid than for others? Use two details from the passage.

3. Compare how quickly street trees and shaded bus shelters could help riders. What is one limit of each response?

4. Why might the transit rider and the neighborhood gardener favor different responses? What must city officials consider before choosing?

3 YOUR TURN

Your own words

Propose a third response to heat on Riverton's bare route, different from planting trees or installing shelters. In four or five sentences, explain whom it would help, how it would reduce exposure, one limit, and how the city could address that limit.

ANSWER KEY

Who Gets Shade?

PART 1 · READ AND MARK

Underline two causes of unequal heat exposure, circle two groups affected, and number the two proposed responses 1 and 2. Use your marks to trace how street conditions shape the choices people have. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How did two past or physical conditions help create different heat exposure at Riverton's bus stops?	**Wide planting strips and a history of tree care helped one neighborhood gain shade. Narrow sidewalks and street projects without shade left the other route exposed.**
2	Why might heat at the bare stop be harder for some riders to avoid than for others? Use two details from the passage.	**Riders who cannot drive must use the bus, and a worker whose shift ends at noon cannot choose a cooler travel time.**
3	Compare how quickly street trees and shaded bus shelters could help riders. What is one limit of each response?	**Shelters could help sooner, but only at selected stops and not on the walk there. Trees could provide shade for years, but they need space and upkeep and take time to grow.**
4	Why might the transit rider and the neighborhood gardener favor different responses? What must city officials consider before choosing?	**The rider may value quicker protection at stops, while the gardener may value the wider, lasting shade from trees. Officials must consider which stops are most exposed and how to fund upkeep.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Riverton could add a midday bus trip on the bare route during the hottest months. Shorter waits would reduce the time that workers leaving noon shifts spend in direct sun, though the trip would not change the unshaded sidewalks. Extra service costs money and may draw riders away from other routes. The city could test the trip for one summer, ask riders about wait times, and compare ridership before deciding whether to keep it.

Accept other supported cause-and-effect explanations in Part 2. For Part 3, accept a distinct, plausible response that identifies an affected group, explains its effect on heat exposure, and addresses a realistic limit.