

Shade Debate Files

Use several sources to build and test a public-policy claim.

10.R.1.D "Synthesize multiple streams of information from a variety of sources to support claims and introduce counterclaims."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline one detail from each of these three sources: the science club temperature map, the county health records, and the bus rider survey. Circle wording that limits the evidence or presents a competing view.

Should Riverton Add More Shade?

- ① This classroom case uses invented Riverton data. On a July afternoon, students in Riverton mapped temperatures around their neighborhood. A science club used handheld sensors at 24 sites, recording shade, pavement, and air temperature at the same time. Lots with mature trees averaged 6 degrees Fahrenheit cooler than nearby blocks with little shade. The club's map showed the hottest readings beside a large asphalt parking lot and along bus stops without shelters. These observations do not prove that trees alone caused every temperature difference, but they identify places where shade may matter most. The group shared its map with the city parks department.
- ② At the same time, the county health office examined anonymous emergency-room records from the previous three summers. Visits for heat illness rose on days when the local weather station reported temperatures above 95 degrees Fahrenheit. Older adults and outdoor workers appeared most often in the records, although the data did not show where each person had spent the day. A separate survey of 312 bus riders found that 71 percent wanted shaded stops, especially on routes near the hottest map locations. Together, the records, survey, and temperature map suggest that adding shade could reduce discomfort and risk for people waiting outside, but no source measures a new shelter's effect.

- ③ City council members are considering spending \$180,000 on trees and shade structures near three busy bus corridors. Supporters cite the club's map, health records, and rider survey. One council member counters that the money should repair sidewalks instead, because trees need watering and years to grow. Parks staff reply that some structures could provide immediate shade while young trees grow, and that sites could be chosen using the temperature map. Before voting, the council requests cost estimates, maintenance plans, and baseline temperature readings at proposed sites. If a small pilot is approved, staff will compare readings after installation with baseline readings and a similar untreated site under comparable weather conditions before recommending expansion. The debate shows why a strong public claim must combine evidence, acknowledge limits, and address a reasonable competing view.

2 ANSWER WITH EVIDENCE Use the passage

- 1 What claim could supporters make about adding shade near bus corridors? Use evidence from two different source streams in the passage.

- 2 What limitation in the health-office records keeps those records from proving that a new bus shelter would reduce heat illness?

- 3 What counterclaim does the council member introduce, and how do parks staff respond to it?

- 4 What three kinds of information can the council collect before deciding on a pilot? What later comparison would help evaluate the pilot before expansion?
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3 YOUR TURN _____ Your own words

Write a four-sentence recommendation to the city council. State a claim, use evidence from at least two source streams, introduce the sidewalk-repair counterclaim, and respond to it with a detail from the passage.

PART 1 • READ AND MARK

Underline one detail from each of these three sources: the science club temperature map, the county health records, and the bus rider survey. Circle wording that limits the evidence or presents a competing view. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What claim could supporters make about adding shade near bus corridors? Use evidence from two different source streams in the passage.	Supporters could claim that Riverton should add shade near busy bus corridors. The temperature map identified hot, unshaded stops, and 71 percent of surveyed riders wanted shaded stops. Health records also showed more heat-illness visits on days above 95 degrees Fahrenheit.
2	What limitation in the health-office records keeps those records from proving that a new bus shelter would reduce heat illness?	The records do not show where each person spent the day, and they do not measure the effect of a new shelter.
3	What counterclaim does the council member introduce, and how do parks staff respond to it?	The council member says the money should repair sidewalks because trees need watering and take years to grow. Parks staff respond that shade structures can provide immediate shade while young trees grow.
4	What three kinds of information can the council collect before deciding on a pilot? What later comparison would help evaluate the pilot before expansion?	Before the decision, it can collect cost estimates, maintenance plans, and baseline site temperatures. After an approved pilot is installed, compare readings with the baseline and a similar untreated site under comparable weather, to assess change without assuming every difference was caused by the shelter.

PART 3 · YOUR TURN (SAMPLE ANSWER)

The council should install shade structures at the hottest bus stops and plant trees where they can be maintained. The club found cooler temperatures near mature trees, and riders on hot routes asked for shaded stops, while health records show more heat illness on very hot days. Critics reasonably argue that sidewalk repairs may be a better use of funds because trees require watering. The city can prioritize dangerous sidewalk repairs while using map data to place structures that give riders shade as trees grow.

Accept claims that synthesize at least two distinct source streams and accurately explain a limitation or counterclaim. For the open response, accept reasonable recommendations if the evidence, counterclaim, and response match details in the passage. All Riverton measurements, survey results and costs are simulated. Distinguish evidence available before a funding decision from evidence obtainable after an approved pilot; no post-installation result is assumed in advance.