

Heat Data Decisions

Synthesize several evidence streams into a defensible civic recommendation.

11.C.3.C "Monitor, organize, analyze, and synthesize multiple streams of simultaneous information to create a summary or formulate a position."

NAME _____

DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each distinct evidence source, circle each limitation or uncertainty, and number the proposed actions 1 and 2. These marks will help you connect evidence to a careful position.

Riverton's Heat Plan

- ① During a July heat wave, Riverton's public health office received three kinds of reports at once. Weather stations recorded nighttime temperatures that stayed above 80°F for four nights. A satellite map showed that the west side, where roofs and parking lots cover much of the ground, held more heat after sunset than neighborhoods with mature trees. At the same time, the city's 311 phone line logged 146 heat-related calls, including requests for water and wellness checks. These streams do not measure the same thing, but together they show where heat may be most dangerous.
- ② City analysts compared the reports with electricity data from the local utility. On the hottest evening, households on the west side used 18 percent more electricity per customer than the city average, suggesting heavier air-conditioner use. Yet the call records cannot prove that every caller lacked cooling, because some people may have called for a neighbor or used a mobile phone outside their home. A survey added another perspective: 62 percent of 210 west-side respondents said they avoided opening windows at night because traffic noise or safety concerns made them uncomfortable. The survey was voluntary, so it may not represent every resident.
- ③ At a public meeting, the health office proposed two responses: extend library cooling-center hours until 10 p.m. and fund shade trees at bus stops and along west-side sidewalks. The electricity data supports immediate cooling access, while the satellite map and temperature readings support reducing heat stored by paved surfaces over time. Survey comments explain why a cooling center must be nearby and open late, rather than assuming residents can cool their homes by opening windows. Still, the council should request call locations and a broader survey before deciding which blocks receive the first tree plantings. The combined evidence supports acting now while improving the next round of data.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What three information streams appear in paragraph 1, and what shared concern do they raise when read together?

2 What does the utility's 18 percent figure suggest, and what important conclusion does the passage say the call records cannot prove?

3 How do the survey results change the design of a useful cooling-center plan? Use evidence from the passage.

4 Which proposed response addresses an immediate need, which addresses a longer-term cause, and what evidence supports each choice?

3 YOUR TURN _____ Your own words

Write a 70 to 90 word recommendation to the Riverton council that ranks the two actions. Use at least three evidence streams, identify one limitation in the evidence, and name one additional piece of information the council should collect.

PART 1 • READ AND MARK

Underline each distinct evidence source, circle each limitation or uncertainty, and number the proposed actions 1 and 2. These marks will help you connect evidence to a careful position. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What three information streams appear in paragraph 1, and what shared concern do they raise when read together?	Weather-station temperatures, the satellite heat map, and 311 heat-related calls. Together, they raise concern that heat may be especially dangerous on Riverton's west side.
2	What does the utility's 18 percent figure suggest, and what important conclusion does the passage say the call records cannot prove?	It suggests west-side households used air conditioning more heavily than the city average. The call records cannot prove that every caller lacked cooling.
3	How do the survey results change the design of a useful cooling-center plan? Use evidence from the passage.	They indicate that a cooling center should be nearby and open late because some residents do not feel comfortable opening windows at night.
4	Which proposed response addresses an immediate need, which addresses a longer-term cause, and what evidence supports each choice?	Extending library cooling-center hours addresses the immediate need, supported by electricity use and the need for cooling access. Planting shade trees addresses the longer-term cause, supported by satellite and temperature evidence of heat retained by paved surfaces.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Riverton should extend library hours first, then begin tree planting after collecting better neighborhood data. The weather readings and satellite map show that heat persists at night, and the utility data suggests residents are already relying heavily on air conditioning. Survey responses show why homes may not provide comfortable nighttime relief. However, the voluntary survey and citywide call total do not identify every high-need block. The council should gather call locations and a representative neighborhood survey before selecting planting sites.

Accept well-supported recommendations that accurately synthesize at least three streams rather than listing them separately. Students may rank either action first if they explain the choice with passage evidence, acknowledge a limitation, and request relevant additional data.