Shade Questions

Connect topics through focused research.

6.T.RA.1.a "Generate questions to guide research and make connections between related topics of interest, formulating questions to investigate complex topics and ideas. (I)"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each research question in the passage. Then number the related topics that each question connects, such as trees, temperature, transportation, or health.

Shade at the Bus Stop

1. On a hot July afternoon, Maya notices that the bus stop near her apartment has no shade. The sidewalk feels hotter than the grassy park across the street. She wants to research heat in her city, but "Why is the city hot?" is too broad. Maya narrows her focus by naming a place, a cause, and people affected. She writes, "How do paved bus stops and nearby trees affect the temperature and comfort of people waiting for buses?" This question can lead to evidence, not just opinions.

2. To investigate the idea, Maya connects related topics instead of studying the bus stop alone. Surface materials, tree cover, air temperature, and public health are connected because pavement absorbs sunlight, while trees provide shade. She plans to compare temperatures at shaded and unshaded stops at the same time of day. Then she asks, "Do stops with less tree cover have higher temperatures?" A second question extends the first: "Could higher temperatures make waiting harder for older adults or young children?" Each question is focused, researchable, and linked to the others.

3. After collecting observations, Maya realizes that one question may not explain every part of the issue. She adds, "Which neighborhoods have the fewest shaded bus stops, and how does this pattern relate to where residents depend most on buses?" This question connects shade, transportation, and fairness. Maya would need several sources, such as city tree maps, transit maps, temperature measurements, and neighborhood population data. She also needs to ask whether new trees, shade structures, or cooler pavement could help. Her questions guide what information she gathers and how she compares it.

2 ANSWER WITH EVIDENCE

Use the passage

1. Why is Maya's first question about why the city is hot too broad for her research?

2. How does Maya's question about tree cover build on her question about paved bus stops and trees?

3. What two related topics does Maya connect when she asks about neighborhoods with few shaded bus stops and residents who depend on buses?

4. Why would Maya use city tree maps, transit maps, temperature measurements, and population data instead of only one source?

3 YOUR TURN

Your own words

Choose a community issue that is not about bus stops or city heat. Write a broad research topic and three connected research questions. At least one question must connect two related topics, and at least one question must name a source you could use.

ANSWER KEY

Shade Questions

GRADE 6 · 6.T.RA.1.a

PART 1 · READ AND MARK

Underline each research question in the passage. Then number the related topics that each question connects, such as trees, temperature, transportation, or health. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Why is Maya's first question about why the city is hot too broad for her research?	**It does not name a specific place, cause, or group of people affected.**
2	How does Maya's question about tree cover build on her question about paved bus stops and trees?	**It focuses on one related cause, tree cover, and its possible effect on temperature.**
3	What two related topics does Maya connect when she asks about neighborhoods with few shaded bus stops and residents who depend on buses?	**She connects shade at bus stops with transportation needs. It also connects to fairness among neighborhoods.**
4	Why would Maya use city tree maps, transit maps, temperature measurements, and population data instead of only one source?	**She needs different kinds of evidence to investigate the connections among shade, transportation, temperature, and neighborhood residents.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Topic: Reducing cafeteria food waste. How much unopened food is thrown away in our cafeteria each week? How do menu choices connect to the amount of food students throw away? What can cafeteria waste records and student surveys show about why unopened food is discarded?

Accept answers that explain how focused questions name specific details, investigate relationships, or require evidence from more than one source. In Part 3, accept varied topics if all three questions are researchable, connected, and include a source in at least one question.