Sharpen the Question

Use secondary evidence to refine a research focus.

7.12.C "refine the major research question, if necessary, guided by the answers to a secondary set of questions;"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the first major question and the refined major question. Number each secondary question in the order Maya uses it, then circle the evidence that changes her focus.

Shade Near the Bus Stop

1. At the start of a research project, Maya asked, "How can our town make summer days safer?" The question mattered because pavement and buildings absorb heat, while shade can lower the temperature people feel. However, Maya noticed that her question was too wide. It could include trees, cooling centers, bus schedules, water access, and building materials. She needed secondary questions that would help her decide which part of the problem to study first using evidence.

2. First, Maya asked where people waited outside without shade and which places became hottest in the afternoon. A city heat map showed several hot blocks near the library and two bus stops. Next, she asked who used those spaces and when. Short observations showed that students, older adults, and workers waited at the bus stops during the hottest hours. These answers pointed to a smaller, more specific need than improving every summer condition in town.

3. Maya then asked whether planting trees at the bus stops would be practical. She learned that the stops had little open soil, but nearby library sidewalks had planting strips. She also found that young trees need regular watering, especially during dry periods. Because the evidence did not support planting at the stops themselves, Maya refined her major question to: "How could planting and caring for shade trees along the library sidewalks reduce heat exposure for people walking to and from the bus stops?"

2 ANSWER WITH EVIDENCE

Use the passage

1. What was Maya's first major research question, and why did she need to refine it?

2. What evidence answered Maya's first set of secondary questions, and how did that evidence narrow her focus?

3. Which answer to a secondary question kept Maya from focusing on planting trees directly at the bus stops?

4. Write Maya's refined major research question exactly as it appears in the passage.

3 YOUR TURN

Your own words

Jordan begins with this broad question: "How can our school make recess more comfortable in hot weather?" Secondary research shows that the blacktop is hottest at noon, most classes use the east playground, and the west playground already has large shade trees. Write a refined major research question that focuses on one practical next step, then explain how two findings guided your revision.

ANSWER KEY

Sharpen the Question

GRADE 7 · TEKS 7.12.C

PART 1 · READ AND MARK

Underline the first major question and the refined major question. Number each secondary question in the order Maya uses it, then circle the evidence that changes her focus. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What was Maya's first major research question, and why did she need to refine it?	**Her first question was "How can our town make summer days safer?" It was too wide because it could include many different issues, such as trees, cooling centers, water access, and building materials.**
2	What evidence answered Maya's first set of secondary questions, and how did that evidence narrow her focus?	**A heat map showed hot blocks near the library and bus stops, and observations showed that students, older adults, and workers waited at the stops during the hottest hours. The evidence narrowed her focus to heat exposure near bus access.**
3	Which answer to a secondary question kept Maya from focusing on planting trees directly at the bus stops?	**She learned that the bus stops had little open soil, so planting trees there was not practical.**
4	Write Maya's refined major research question exactly as it appears in the passage.	**How could planting and caring for shade trees along the library sidewalks reduce heat exposure for people walking to and from the bus stops?**

PART 3 · YOUR TURN (SAMPLE ANSWER)

How could adding shade structures on the east playground reduce heat exposure for students during noon recess? The blacktop's noon heat and the fact that most classes use the east playground focused the question on that area. The west playground already has shade, so it is a lower priority.

Accept refined questions that are narrower than the original question, name a workable focus, and are guided by at least two provided findings. Wording may vary if the question clearly connects evidence from secondary questions to the revised research focus.