

Question Under Construction

Trace how a focused question guides reliable research.

ELA.10.C.4.1 “Conduct research to answer a question, refining the scope of the question to align with findings and synthesizing information from multiple reliable and valid sources.”

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the words that narrow Maya’s research question, then number each source she uses and circle one detail that shows how she evaluates or combines its information.

Cooling the Bus Stop

- ① At first, Maya asked, “How can cities reduce dangerous summer heat?” The question was too broad for a two-week project. She narrowed it to one place and one decision: “Which changes could lower afternoon heat on bus stops in Phoenix?” This scope let her compare shade, pavement, and nearby trees without trying to study every neighborhood or weather risk. Maya listed what evidence she needed: temperature measurements, information about materials, costs, and limits such as water use. She planned to revise the question again if sources showed that one proposed change could not be measured fairly.
- ② She began with Phoenix’s Heat Response and Mitigation Plan, published by the city in 2021. Because the plan identified extreme heat as a local hazard and described existing shade efforts, it helped Maya define the setting, but it did not prove which design worked best. Next, she used a peer-reviewed study that measured temperatures at Phoenix bus stops. The researchers found that shade structures reduced surface temperatures compared with unshaded stops. Maya checked the authors’ methods, publication date, and location. She also noted a limitation: surface temperature is not the same as air temperature or human comfort.
- ③ A transportation department webpage supplied estimates for installing and maintaining shade structures. Maya treated those figures as useful but interested, because the department might favor projects it manages. To balance that source, she found a nonprofit report on tree canopy and a county health dashboard showing emergency visits. The report explained that trees can cool areas over time, while the dashboard showed why heat exposure matters. After comparing the sources, Maya refined her question: “For Phoenix bus stops with limited shade, should the city prioritize structures or trees to reduce heat exposure?” Her claim would need to distinguish immediate cooling from benefits and include cost and water limits.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 Why was Maya's first question too broad, and what two choices made her revised question manageable?

2 Which source gave Maya measured evidence about shade structures, and what three features did she check to evaluate it?

3 How did Maya recognize possible bias in the transportation department webpage, and which sources did she use to balance it?

4 State Maya's final refined question. Then name two factors her eventual claim must include.

3 YOUR TURN _____ Your own words

Choose a school or community decision you want to investigate. Write a 100 to 130 word research note that gives a broad question, a refined question, at least three reliable sources you would use, one credibility or bias check, and a preliminary claim that synthesizes the sources.

PART 1 • READ AND MARK

Underline the words that narrow Maya's research question, then number each source she uses and circle one detail that shows how she evaluates or combines its information. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Why was Maya's first question too broad, and what two choices made her revised question manageable?	It covered all cities and all ways to reduce heat. She focused on Phoenix and on changes at bus stops.
2	Which source gave Maya measured evidence about shade structures, and what three features did she check to evaluate it?	A peer-reviewed study of Phoenix bus stops. She checked the authors' methods, publication date, and location.
3	How did Maya recognize possible bias in the transportation department webpage, and which sources did she use to balance it?	She recognized that the department might favor projects it manages. She added a nonprofit tree-canopy report and a county health dashboard.
4	State Maya's final refined question. Then name two factors her eventual claim must include.	Her question asks whether Phoenix should prioritize shade structures or trees at bus stops with limited shade. Her claim must address immediate cooling and longer-term benefits, plus cost and water limits.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Broad question: How should schools improve teen sleep? After reading the CDC's teen sleep guidance, the American Academy of Pediatrics policy statement, and a peer-reviewed study of Seattle's later high school start time, I refined it: Would moving our high school start time to 8:30 or later increase students' sleep without creating major transportation problems? The CDC and AAP are expert health sources, and the study reports measured results, but Seattle's results may not match our district. Together, the sources support a preliminary claim that later starts can help teen sleep. I would also research local bus schedules and costs before recommending a change.

Accept equivalent explanations that accurately distinguish a source's purpose, evidence, limitation, or possible bias. For the open task, accept varied topics when the response narrows the scope, identifies three credible sources, evaluates reliability or bias, and combines source information into a qualified claim.