

Evidence Under Trees

Track how a researcher narrows a question and combines sources.

CCSS.ELA-Literacy.WHST.9-10.7 "Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the first mention of each of Malik's three sources and number them 1-3. Circle phrases that tell what a source contributes or cannot show, then draw an arrow to the sentence that combines the sources into a claim.

Investigating Hot Bus Stops

- ① Malik began a research project after noticing that his bus stop felt much hotter than a nearby shaded block. His first question, "Why is my city getting hotter?" was too broad for a two-week project. He narrowed it to, "How might tree cover affect summer heat at bus stops in the Eastside neighborhood?" The revised question named a place, a condition, and a possible relationship. It also left room for evidence that could complicate his idea. Malik planned to investigate both temperature data and the locations of trees, rather than assuming that shade alone explained every difference.
- ② To build background, Malik used three sources. A city planning department map showed street-tree locations and canopy estimates, so he could identify bus stops with little nearby cover. A peer-reviewed urban-climate study explained that tree shade can lower surface temperatures and may reduce nearby air temperatures, but its results came from several cities, not Eastside alone. A county public-health webpage described heat illness risks and advised people to seek shade and water during hot weather. That webpage established why heat mattered to riders, yet it did not explain whether tree coverage differed among local bus stops.
- ③ Malik synthesized the sources instead of treating any one as a complete answer. The map suggested where local shade was scarce, while the study supplied a scientific explanation for why those places might be hotter. The public-health webpage added the human importance of heat exposure, but it could not show the pattern of tree cover. Together, the sources supported a focused claim: limited tree cover may contribute to hotter conditions at some Eastside bus stops and could affect rider safety. Malik also recognized a gap. None of his sources measured temperatures at the stops, so he broadened his inquiry to include weather records or observations before recommending trees.

2 ANSWER WITH EVIDENCE _____ Use the passage

1 What made Malik's first research question too broad, and how did his revised question make the inquiry more manageable?

2 What did the city map contribute to Malik's research, and what did the urban-climate study contribute?

3 How did Malik synthesize the strengths and limits of all three sources?

4 What evidence gap caused Malik to broaden his inquiry, and what evidence did he plan to add?

3 YOUR TURN _____ Your own words

Create a mini research plan about a school or community issue. Write a focused question, name three different sources, explain what each can contribute and one limit, state a claim the sources could support, and explain one way you could narrow or broaden the inquiry.

PART 1 • READ AND MARK

Underline the first mention of each of Malik's three sources and number them 1-3. Circle phrases that tell what a source contributes or cannot show, then draw an arrow to the sentence that combines the sources into a claim. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	What made Malik's first research question too broad, and how did his revised question make the inquiry more manageable?	The first question asked why the entire city was getting hotter. The revised question focused on tree cover, summer heat, bus stops, and one neighborhood.
2	What did the city map contribute to Malik's research, and what did the urban-climate study contribute?	The map identified local bus stops with little nearby tree cover. The study provided scientific evidence that tree shade can lower surface temperatures and may reduce nearby air temperatures.
3	How did Malik synthesize the strengths and limits of all three sources?	The map showed where local shade was scarce, the study explained why shade might affect heat but was not specific to Eastside, and the public-health webpage showed why heat exposure mattered but did not explain local tree coverage. None of the sources measured temperatures at the bus stops.
4	What evidence gap caused Malik to broaden his inquiry, and what evidence did he plan to add?	His sources did not measure temperatures at the bus stops. He planned to include weather records or observations before recommending trees.

PART 3 • YOUR TURN (SAMPLE ANSWER)

My question is, "How might a later start time affect first-period attendance at our high school?" If this is too large, I would narrow it to ninth-grade students. I would compare attendance records, a peer-reviewed sleep study, and a district transportation report. Records show local patterns but not causes; the study explains likely sleep effects but may not match our community; the report shows bus constraints but not student choices. Together, these sources could support testing whether a later start improves first-period attendance, while a student survey could investigate morning barriers.

Accept equivalent explanations that accurately distinguish source contributions from source limits. For the open task, accept varied topics when the response includes a focused inquiry, three sources, synthesis, and a reasonable narrowing or broadening move.