Follow the Evidence

Shape a research question as sources reveal what you still need to know.

9-10.W.7 "Conduct short as well as more sustained research; narrow or broaden the inquiry when appropriate; demonstrate understanding of the subject under investigation using multiple sources."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the first narrowed research question, circle the later broadened question, and number each source or type of evidence the researcher uses. These marks will help you trace how the inquiry changes.

Where Would Shade Help?

1. The question I first wrote was, "How can our town stay cool?" That could lead to a report on buildings, weather, trees, or health, so I narrowed it to: "Which bus-stop benches near our high school lack afternoon shade?" I began with the U.S. Environmental Protection Agency's explanation of urban heat islands. It describes how paved surfaces absorb and hold heat and how trees can cool spaces through shade and evaporation. This source explains why shade might matter, but it cannot tell me which local stops have little shade or how many people use them.

2. Next, I checked the transit agency's published stop list to locate nearby benches. I visited three stops on the same clear afternoon and recorded whether each bench was shaded at 3 p.m. The list helped me find stops, but it did not report shade. My notes showed that two benches were in direct sun and one sat beneath a tree. Yet a single afternoon cannot show what happens in different seasons, and three stops cannot represent the whole town. I also cannot infer how many people use a stop from the presence of a bench.

3. I then broadened my inquiry slightly: "Which nearby stops combine little afternoon shade with frequent use?" The agency's published schedules can show how often buses arrive, but not how many people board. To investigate use, I would request boarding counts from the agency, if it collects them, or count waiting passengers at several times of day. Together, the EPA explanation, agency records, and direct observations could support a cautious recommendation about where to test a shade structure. They would not prove that adding shade would solve every heat risk, especially on unusually hot days.

2 ANSWER WITH EVIDENCE

Use the passage

1. Why did the researcher narrow the first question? Explain how the new question makes the investigation more manageable.

2. What can the EPA explanation help establish, and what must the researcher learn from a local source or observation?

3. What limit of the researcher's observations makes a longer investigation necessary? Describe one observation that would address that limit.

4. How does the later question broaden the inquiry, and why would bus schedules alone be insufficient to answer it?

3 YOUR TURN

Your own words

Choose a school or community issue other than bus-stop shade. In five or six sentences, write a broad research question, narrow it, identify two different sources and what each can or cannot show, then explain when and why you might broaden the inquiry again.

Follow the Evidence

PART 1 · READ AND MARK

Underline the first narrowed research question, circle the later broadened question, and number each source or type of evidence the researcher uses. These marks will help you trace how the inquiry changes. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Why did the researcher narrow the first question? Explain how the new question makes the investigation more manageable.	**The first question covers many topics. The new question focuses on afternoon shade at bus-stop benches near one school, which the researcher can investigate directly.**
2	What can the EPA explanation help establish, and what must the researcher learn from a local source or observation?	**The EPA explanation helps establish why pavement and shade matter. A local source or observation is needed to identify which nearby benches lack shade.**
3	What limit of the researcher's observations makes a longer investigation necessary? Describe one observation that would address that limit.	**One afternoon does not show shade conditions in other seasons. Observing the same benches at other times of year would address that limit.**
4	How does the later question broaden the inquiry, and why would bus schedules alone be insufficient to answer it?	**The later question adds how frequently people use the stops. Schedules show bus arrivals, not passenger numbers, so the researcher would need boarding counts or repeated passenger observations.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

My starting question is, "How can our school save resources?" I would narrow it to, "How much paper do classrooms discard after one-sided printing in a typical week?" Custodial collection records could estimate how much paper is discarded, but they might not separate one-sided sheets from other paper. With permission, I could inspect a sample of recycling bins to count one-sided pages, though that sample might miss some classrooms. If the records lack enough detail, I would broaden the inquiry to paper waste overall and use both sources to identify where reduction efforts might help.

Accept different wording when students distinguish general explanations from local evidence and identify what a source cannot establish. For Part 3, look for a justified change in scope and two sources with distinct uses or limitations.