Research Like a Detective

Judge sources, notice limits, and refine an inquiry.

ELA.8.C.4 "Researching"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Circle the two sources Lena chooses for her research. Underline two details that show why her evidence is limited or what she needs to study next.

Cooling a Schoolyard

1. For a project on summer heat, Lena asks, "How does tree cover affect afternoon temperatures at Riverton's middle schools?" She needs evidence about the same places, time of day, and season named in her question. First, she makes a chart with columns for source, author, date, evidence, and limits. She plans to compare shaded and unshaded areas rather than rely on one unusually hot day. Her teacher reminds her that a source can be trustworthy yet still fail to answer her exact question.

2. Lena finds three possible sources. The city parks department's 2024 tree inventory lists tree locations and canopy percentages for each school property. A university climate lab posts temperature readings collected at 3 p.m. during July 2023, including sensor locations and methods. A popular gardening blog says that trees "make every playground cooler," but it gives no author's name, data, or links. Lena chooses the inventory and lab report because they identify their creators, dates, methods, and evidence.

3. After mapping the two data sets, Lena sees that schools with more canopy often have cooler readings, but the readings were taken on only four July days. The city inventory also measures whole properties, not specific playground surfaces where students stand. Lena does not claim that trees alone caused each difference because pavement, building shade, and wind may matter. She refocuses her inquiry: "At the same school, how do shaded and unshaded playground surfaces compare at 3 p.m. across several summer weeks?" This question guides her next search.

2 ANSWER WITH EVIDENCE

Use the passage

1. What two details in the university climate lab report help Lena judge it as a useful source?

2. Which source is least useful for Lena's inquiry? Give two reasons from the passage.

3. Why do Lena's two chosen sources not fully answer her first question? Name two limits.

4. How does Lena's new question make her research more focused?

3 YOUR TURN

Your own words

Choose a schoolyard environmental question that is different from Lena's question. Write one focused research question, then list three sources you would use, the evidence each source could provide, and one check you would use to judge each source reliable or relevant.

SOURCE	EVIDENCE IT COULD PROVIDE	RELIABILITY OR RELEVANCE CHECK

ANSWER KEY

Research Like a Detective

GRADE 8 · ELA.8.C.4

PART 1 · READ AND MARK

Circle the two sources Lena chooses for her research. Underline two details that show why her evidence is limited or what she needs to study next. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	What two details in the university climate lab report help Lena judge it as a useful source?	**It gives temperature readings collected at 3 p.m. in July 2023 and includes sensor locations and methods.**
2	Which source is least useful for Lena's inquiry? Give two reasons from the passage.	**The popular gardening blog is least useful because it gives no author's name, data, or links.**
3	Why do Lena's two chosen sources not fully answer her first question? Name two limits.	**The temperature readings cover only four July days, and the tree inventory measures whole school properties rather than specific playground surfaces.**
4	How does Lena's new question make her research more focused?	**It compares shaded and unshaded surfaces at the same school, at 3 p.m., across several summer weeks.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Question: How do morning bus arrivals affect noise levels outside my school? The school's bus schedule could show arrival times, and I would check that it is current and published by the district. City traffic counts could show nearby vehicle volume, and I would check the dates, locations, and counting method. My sound-meter readings over five mornings could show noise levels, and I would record the same location, times, weather, and meter settings each day.

For Questions 1 through 4, accept equivalent details stated in the passage. For the open task, accept varied topics if the question is focused and each of three sources includes relevant evidence plus a reasonable reliability or relevance check.