

Scope and Sources

Match a research question to evidence that can answer it.

ELA.9.C.4.1 "Conduct research to answer a question, drawing on multiple reliable and valid sources and refining the scope of the question to align with findings."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline the words that show how the committee narrowed its question, circle each source, and number the details that explain why a source or plan is useful or limited.

Studying Sleep at Brookside

- ① At Brookside High, a student council committee wanted to investigate a common complaint: students felt tired during first period. Their first question was, "Would moving the opening bell later improve student sleep?" The committee recognized that this cause-and-effect question was too broad for the information it could collect. The school had not changed its bell time, so no local data could compare sleep before and after a change. The committee refined the question: "How many hours of sleep do Brookside students report on school nights, and how do reports vary by grade level?" This descriptive question matched evidence the team could gather accurately.
- ② To answer the refined question, the committee planned two sources. First, the registrar would provide enrollment totals for each grade from the official school database. Those totals would help the committee see whether survey responses represented each grade. Second, students would complete an anonymous survey asking their grade level and their usual hours of sleep on school nights. The committee would publish the exact survey questions and collect responses during the same week. A national health agency webpage about teen sleep could explain why sleep matters, but it could not describe Brookside students. A social media poll would be less reliable because anyone could vote, and voters' grade levels and identities could not be verified.
- ③ After reviewing 180 survey responses, the committee found that ninth graders reported an average of 7.1 hours of sleep on school nights, while twelfth graders reported 6.4 hours. Enrollment records showed that ninth graders made up 25 percent of the school but 45 percent of survey respondents. Because one grade was overrepresented, the results could not reliably describe the whole school. The committee could report the responses it received, with that limitation. It could also send the survey to a randomly selected group from each grade, using enrollment totals to select equal proportions. This revised plan would produce a more balanced description of reported sleep across grades.

2 ANSWER WITH EVIDENCE Use the passage

1 Why could the committee not answer its first question with the local information it planned to collect?

2 Which source would help the committee decide whether its survey responses represented each grade, and why?

3 Why could a national health agency webpage not answer the committee's refined question by itself?

4 What limitation did the committee find in its survey results, and what revised plan would address it?

3 YOUR TURN Your own words

Choose a school-related topic. Write an initial broad question, refine it into an answerable question, then name two reliable sources and explain in one phrase what each source can show.

PART 1 • READ AND MARK

Underline the words that show how the committee narrowed its question, circle each source, and number the details that explain why a source or plan is useful or limited. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	Why could the committee not answer its first question with the local information it planned to collect?	The school had not changed its bell time, so the committee had no local sleep data from before and after a time change.
2	Which source would help the committee decide whether its survey responses represented each grade, and why?	The registrar's official enrollment totals would allow the committee to compare each grade's share of the survey responses with its share of the school.
3	Why could a national health agency webpage not answer the committee's refined question by itself?	It could provide general information about teen sleep, but it could not describe Brookside students' reported sleep.
4	What limitation did the committee find in its survey results, and what revised plan would address it?	Ninth graders were overrepresented, making up 45 percent of respondents but 25 percent of the school. The committee could randomly select equal proportions of students from each grade.

PART 3 • YOUR TURN (SAMPLE ANSWER)

Broad question: Does homework cause stress at Brookside High? Refined question: What homework time do Brookside tenth graders report during a typical week, and what stress ratings do they report? An anonymous survey sent to randomly selected tenth graders can provide the reports, and the registrar's official tenth-grade enrollment total can show how well respondents represent that grade.

Accept equivalent explanations of why the original causal question requires before-and-after evidence and why the revised question is descriptive. For the open task, accept varied topics if the refined question matches the proposed sources and the student explains each source's use.