Follow the Evidence

Refine a research question as new evidence changes the focus.

9-10.W.5.a "Formulate an inquiry question and refine and narrow the focus as research evolves."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the researcher's starting problem, circle evidence about bus times and routes, and number two discoveries that would make you narrow the inquiry question.

The Missing Club Members

1. At Cedar Ridge High, a student researcher noticed that the robotics room was crowded in September but nearly empty by November. She wanted to investigate why students stopped attending after-school clubs. The adviser shared sign-in sheets for four clubs. Each club lost members, but the sheets did not record anyone's reason for leaving. In brief interviews, some students mentioned homework, some mentioned jobs, and others mentioned trouble getting home. The researcher could not test every explanation in one project. She needed an inquiry question that would guide her toward evidence she could actually collect.

2. She interviewed 18 students who had stopped attending clubs; 12 said they usually rode the city bus. Six of those 12 mentioned that the bus outside school left at 3:20, before clubs ended at 4:00. The other six described different problems, including long walks to bus stops and conflicts with family schedules. The city transit website listed another bus at 4:30, so the 3:20 departure alone could not explain the lost attendance. Now the researcher had a promising transportation angle, but she needed to check whether the later bus served the neighborhoods where those students lived.

3. A route map and schedule showed that the 4:30 bus traveled east, while four of the six students concerned about the 3:20 departure lived west of school. A westbound bus left at 3:20; the next westbound trip left at 5:45. The researcher checked those four students' interview notes: all four had attended clubs in September, but none had gone in November. That pattern did not prove the bus schedule caused them to leave. To investigate further, she could compare attendance records with students' accounts and ask what other barriers those four faced.

2 ANSWER WITH EVIDENCE

Use the passage

1. Using the evidence available at the end of paragraph 1, write an initial inquiry question the researcher could investigate.

2. After the interviews in paragraph 2, how could the researcher narrow her question to focus on transportation? Write a revised inquiry question.

3. What detail in paragraph 2 challenges a question focused only on the 3:20 bus, and how should it shift the focus?

4. Use the evidence in paragraph 3 to write a narrower inquiry question that does not assume the bus schedule caused students to leave.

3 YOUR TURN

Your own words

Choose a school issue other than clubs or transportation. Write an initial inquiry question, invent two plausible findings that would change its focus, and write a revised question after each finding. Make your final question narrow enough to investigate with specific evidence.

ANSWER KEY

Follow the Evidence

HIGH SCHOOL · 9-10.W.5.a

PART 1 · READ AND MARK

Underline the researcher's starting problem, circle evidence about bus times and routes, and number two discoveries that would make you narrow the inquiry question. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Using the evidence available at the end of paragraph 1, write an initial inquiry question the researcher could investigate.	**What reasons do former club members at Cedar Ridge High give for leaving after-school clubs?**
2	After the interviews in paragraph 2, how could the researcher narrow her question to focus on transportation? Write a revised inquiry question.	**How do bus departure times compare with club end times for former club members who usually rode the bus?**
3	What detail in paragraph 2 challenges a question focused only on the 3:20 bus, and how should it shift the focus?	**A bus also leaves at 4:30. The researcher should investigate whether that later bus serves the students' neighborhoods.**
4	Use the evidence in paragraph 3 to write a narrower inquiry question that does not assume the bus schedule caused students to leave.	**What role, if any, did the gap between westbound buses play in the four interviewed students' decisions to stop attending clubs?**

PART 3 · YOUR TURN (SAMPLE ANSWER)

Initial question: How does cafeteria food waste vary at my school? Finding 1: Cafeteria staff report that unopened milk cartons are often discarded. Revised question: How many unopened milk cartons are discarded during lunch? Finding 2: Staff report that most unopened cartons come from the last lunch period. Final question: How many unopened milk cartons are discarded during the last lunch period over two weeks?

Accept questions that fit the evidence available at each stage, even if their wording differs. The final question should name a limited group or situation and remain open to more than one finding.