Questions Within Reach

Use available evidence to shape a research question

8.6.W.1 "Students will formulate and refine a viable research question."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline two kinds of evidence Mila can collect and circle two limits on her investigation. Use your marks to think about what her evidence could answer.

Mila's Cafeteria Investigation

1. At Westbridge Middle School, Mila noticed unopened milk cartons and whole apples in the cafeteria bins. She wanted to investigate food waste, but the topic could include farms, stores, restaurants, and homes. Her teacher gave the class five lunch periods for collecting evidence. Mila could stand by the tray return station and record the number of unopened milk cartons and whole apples left on trays. She could not follow food after it left the building. That limit mattered when she chose what to ask.

2. Counting items would show patterns, but it would not explain every student's choice. Mila could also offer a brief, anonymous survey asking students why they left a piece of fruit uneaten. The survey would collect reported reasons, not proof of what any student actually did. A classmate proposed estimating how much food all middle school students in the country throw away each year. Mila had no national records, and five days at one school could not support that estimate. She crossed that idea off her planning page.

3. Near the tray return, a share table held unopened, school-approved items that other students could take. Staff members agreed to let Mila tally how many unopened items students placed there and how many were taken during the same five lunch periods. She could not tell from those tallies whether the table ended food waste across the school. Instead, she needed a question that named a place, a short period, and something her notes could actually measure. She left room on her page to change her question after the first day of counting.

2 ANSWER WITH EVIDENCE

Use the passage

1. Write a research question Mila could answer by counting unopened milk cartons at the tray return.

2. Write a research question about uneaten fruit that Mila's survey could help answer. Then name one limit of the survey evidence.

3. Revise the classmate's national food-waste idea into a question Mila could answer with her tray-return notes.

4. Revise "Does the share table solve food waste?" into a question Mila could answer with her share-table tallies.

3 YOUR TURN

Your own words

Choose a school or neighborhood topic other than cafeteria waste. Write a broad starting question, refine it into a question that names a specific group or place, a time span, and evidence you could realistically collect, then explain how you would collect that evidence.

ANSWER KEY

Questions Within Reach

GRADE 8 · 8.6.W.1

PART 1 · READ AND MARK

Underline two kinds of evidence Mila can collect and circle two limits on her investigation. Use your marks to think about what her evidence could answer. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Write a research question Mila could answer by counting unopened milk cartons at the tray return.	**How many unopened milk cartons are left on trays during five lunch periods at Westbridge Middle School?**
2	Write a research question about uneaten fruit that Mila's survey could help answer. Then name one limit of the survey evidence.	**What reasons do Westbridge students report for leaving fruit uneaten during the five lunch periods? The survey records what students say, not proof of what they did.**
3	Revise the classmate's national food-waste idea into a question Mila could answer with her tray-return notes.	**How many whole apples are left on trays during five lunch periods at Westbridge Middle School?**
4	Revise "Does the share table solve food waste?" into a question Mila could answer with her share-table tallies.	**How many unopened items are taken from the share table during five lunch periods at Westbridge Middle School?**

PART 3 · YOUR TURN (SAMPLE ANSWER)

How does noise affect people? During one school week, how many students in my homeroom say hallway noise distracts them before first period? I could give my homeroom an anonymous one-question survey and count the responses.

Accept different focused questions if Mila could answer them with the stated evidence in five lunch periods. For Part 3, look for a clear change from broad to specific and a realistic way to collect evidence.