Filter Facts Check

Compare sources before choosing a school water filter.

6.4.B "make informed decisions by evaluating evidence from multiple appropriate sources to assess the credibility, accuracy, cost-effectiveness, and methods used; and"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline details that show how a source gathered evidence or why it is credible. Circle details about costs or missing information that could affect the decision.

Choosing a Water Filter

1. The Green Team at Pine Ridge Middle School is choosing a filter for a drinking-water station. The team needs a filter that lowers lead levels, fits the school budget, and can be maintained easily. They collect three sources. ClearSpring, a filter company, posts a brochure saying its model removes 99 percent of lead. The brochure lists a low purchase price, but it does not explain how the company tested the filter or how often cartridges must be replaced.

2. Next, the team reads a report from a state-certified laboratory. The lab tested three new filters by sending water with a known amount of lead through each one five times. ClearSpring removed 96 to 98 percent in those trials. The report gives the testing method, dates, and results, so the team can check its claim. However, the report tested new cartridges only. It does not show how well the filter works after months of school use.

3. Finally, the custodian shares invoices and maintenance records from a nearby school using ClearSpring. That school bought cartridges every three months, making the first-year cost higher than the brochure suggests. Its records show no lead test results, so they cannot prove the filter's performance. The Green Team decides the laboratory report is the most credible source about lead removal because its methods and results are described. Before buying, the team will compare cartridge costs and ask for tests of used filters.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which source gives the strongest evidence about how much lead the filter removes? Use one detail about its method to explain your answer.

2. Why should the team be careful about accepting the brochure's 99 percent claim as accurate?

3. What evidence suggests that the filter may cost more than its low purchase price suggests?

4. What important performance information is still missing from the laboratory report?

3 YOUR TURN

Your own words

You are choosing a soil-test kit for a school garden. Write six sentences naming three appropriate sources you would use, the evidence you would check in each, and how methods, credibility, and total cost would affect your choice. State one extra piece of information you would request before deciding.

ANSWER KEY

Filter Facts Check

GRADE 6 · TEKS 6.4.B

PART 1 · READ AND MARK

Underline details that show how a source gathered evidence or why it is credible. Circle details about costs or missing information that could affect the decision. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which source gives the strongest evidence about how much lead the filter removes? Use one detail about its method to explain your answer.	**The state-certified laboratory report. It tested water with a known amount of lead through each filter five times and described its methods and results.**
2	Why should the team be careful about accepting the brochure's 99 percent claim as accurate?	**The brochure does not explain how the company tested the filter, so the team cannot check the claim or its method.**
3	What evidence suggests that the filter may cost more than its low purchase price suggests?	**Invoices from the nearby school show that cartridges were bought every three months, raising the first-year cost.**
4	What important performance information is still missing from the laboratory report?	**The report tested only new cartridges. It does not show how well the filter removes lead after months of school use.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would compare the company instructions, an independent university extension review, and prices from local suppliers. In the company instructions, I would check which nutrients the kit measures and how many tests it includes. In the extension review, I would look for a described comparison with known soil samples. A review with clear methods would be more credible than an unsupported advertisement. I would calculate the cost per test, including replacement chemicals. Before choosing, I would ask how long the chemicals remain accurate.

Accept equivalent explanations that use passage evidence about source methods, missing evidence, credibility, or total cost. For the open response, accept reasonable sources and evidence checks if the student addresses methods, credibility, cost, and one needed additional detail.