Garden Evidence Hunt

Use measurements and test details to understand a class investigation.

4.13.E "demonstrate understanding of information gathered;"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline each measurement, circle the conclusion, and number two details that made the comparison fair. These marks will help you connect the class's information to its conclusion.

Which Mulch Holds Water?

1. Ms. Chen's class wanted to learn which garden mulch held the most water after rain. They chose three materials: shredded leaves, wood chips, and straw. The class put one cup of each dry material into three matching containers. Each container had small holes in the bottom. They placed the containers side by side on the same table.

2. On Tuesday, students slowly poured one cup of water into each container. After ten minutes, they measured the water that had drained into trays below. Leaves let 3/4 cup drain out, wood chips let 1/2 cup drain out, and straw let 1/4 cup drain out. The class repeated the test two more times. Each time, straw had the least water in its tray.

3. The measurements suggest that straw held more water than the other two mulches in this test. Less water drained from straw, so more stayed in the straw container. The class could use straw around plants that need moist soil. Still, they would need more tests before deciding that straw is best for every garden, because rain, soil, and weather can be different.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which mulch held the most water? Use the drainage measurements to explain your answer.

2. What are two details that made the mulch comparison fair?

3. How did repeating the test help the class understand its information?

4. Why should the class not decide that straw is best for every garden?

3 YOUR TURN

Your own words

Write three sentences recommending one mulch for plants that need moist soil. Include two details from the class's information and one reason more testing would still be useful.

ANSWER KEY

Garden Evidence Hunt

GRADE 4 · TEKS 4.13.E

PART 1 · READ AND MARK

Underline each measurement, circle the conclusion, and number two details that made the comparison fair. These marks will help you connect the class's information to its conclusion. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which mulch held the most water? Use the drainage measurements to explain your answer.	**Straw held the most water because it had the least water drain out, 1/4 cup in the first test.**
2	What are two details that made the mulch comparison fair?	**The class used one cup of each dry material in matching containers and poured one cup of water into each container. The containers were also side by side on the same table.**
3	How did repeating the test help the class understand its information?	**Repeating the test showed that straw had the least drainage each time, which makes the result more dependable.**
4	Why should the class not decide that straw is best for every garden?	**The test was only one classroom investigation, and gardens can have different rain, soil, and weather.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I recommend trying straw around plants that need moist soil. In all three tests, straw had the least water drain into its tray, and in the first test only 1/4 cup drained out. This result is from one classroom test, so gardeners should test straw in their own soil and weather.

Accept equivalent explanations that use the drainage data to show that straw retained more water in this test. For the open response, look for a recommendation, two accurate details from the passage, and a reasonable limit on the conclusion.