Saving the Hill

Test ways to keep soil in place

E.2.10.5 "With teacher guidance, investigate possible solutions to prevent or repair soil erosion."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the three tray setups, then circle the words that tell how muddy the water from each tray was.

A Test for the Hill

1. After rain, Mia saw muddy water run down a bare hill by the school garden. The rain had carried soil away. Mia's class wanted to keep more soil on the hill before the next storm.

2. With their teacher, the class made three soil trays. One stayed bare. Dry leaves covered another. Grass grew in the third, where roots held soil. They poured the same amount of water on each tray and caught the water that ran off.

3. Water from the bare tray was very muddy. Water from the leaf tray was less muddy. Water from the grass tray was the clearest. The class planned to cover the bare hill with leaves now and grow grass there for later storms.

2 ANSWER WITH EVIDENCE

Use the passage

1. How did the class make its test fair when it poured water on the trays?

2. Which cover kept the most soil from washing away? What did the water show?

3. What could the class put on the bare hill right away? How does the test support that choice?

3 YOUR TURN

Your own words

A patch of soil beside a path washes away in the rain. Choose a cover the class did not test, and write two sentences telling how you would test it against bare soil and what you would look for.

ANSWER KEY

Saving the Hill

GRADE 2 · E.2.10.5

PART 1 · READ AND MARK

Underline the three tray setups, then circle the words that tell how muddy the water from each tray was. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How did the class make its test fair when it poured water on the trays?	**They poured the same amount of water on each tray.**
2	Which cover kept the most soil from washing away? What did the water show?	**Grass kept the most soil in place. Water from the grass tray was the clearest.**
3	What could the class put on the bare hill right away? How does the test support that choice?	**They could cover it with dry leaves. Water from the leaf tray was less muddy than water from the bare tray.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would cover one soil tray with straw and leave another tray bare, then pour the same amount of water on both. I would look at which tray loses less soil by checking how muddy the water is.

Accept a new cover that could protect soil, such as straw or wood chips. The test should compare covered and bare soil using the same amount of water and check for soil loss.