Save the Hill

Compare ways to keep rain from moving soil.

2-ESS2-1 "Compare multiple solutions to develop a model designed to slow or prevent wind or water from changing the shape of the land. (SEP: 6; DCI: ESS2.A, ETS1.C; CCC: Stability/Change) Alignment may include K-2-ETS1-3"

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline how each of the three small hills was set up. Circle the words that tell how much dirt moved from each hill.

A Rainy Hill Test

1. After a big rain, dirt slid down a hill by a school garden. The class wanted to keep the hill's shape. They made three small hills of the same soil. They poured the same cup of water on each hill.
2. One hill had grass growing on it. Its roots held the dirt in place. Almost no dirt washed off. On the second hill, the class put a line of rocks at the bottom. The rocks caught dirt, but some dirt washed past them.
3. The third hill had no grass or rocks. The most dirt washed off that hill. Grass kept the most dirt in place, so it worked best in this test. Now the class could plan a way to protect the garden hill.

2 ANSWER WITH EVIDENCE

Use the passage

1. Which hill lost less dirt, the grass hill or the rock hill? How do you know?

2. How did the rocks help? What did they fail to stop?

3. How did the bare hill do compared with the grass hill?

3 YOUR TURN

Your own words

Plan a new way to protect the garden hill using both grass and rocks. In two sentences, tell where you would put each and why your plan might work better than rocks alone.

ANSWER KEY

Save the Hill

GRADE 2 · 2-ESS2-1

PART 1 · READ AND MARK

Underline how each of the three small hills was set up. Circle the words that tell how much dirt moved from each hill. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	Which hill lost less dirt, the grass hill or the rock hill? How do you know?	**The grass hill lost less dirt. Almost no dirt washed off it, but some dirt washed past the rocks.**
2	How did the rocks help? What did they fail to stop?	**The rocks caught dirt, but they did not stop all the dirt from washing past.**
3	How did the bare hill do compared with the grass hill?	**The most dirt washed off the bare hill. Almost no dirt washed off the grass hill.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

I would grow grass across the hill and put a line of rocks at the bottom. The roots could hold dirt before it reaches the rocks, so less dirt might wash past than on the rock-only hill.

For Part 3, accept any clear placement of both grass and rocks with a reasonable explanation of how the plan could keep more dirt in place than rocks alone.