

Hold That Soil

Compare ways people slow wind and water.

2-ESS2-1 "Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. Clarification Statement: Examples of solutions could include different designs of dikes and windbreaks to hold back wind and water..."

NAME _____

DATE _____

1 READ AND MARK _____ Read it twice

YOUR JOB Underline each solution that slows wind or water. Number the solutions 1 through 4 so you can compare what each one uses.

Saving River Bend Soil

- ① Wind and water can move soil from one place to another. At River Bend, fast water was washing soil from a bank. People built a low rock dike along the bank. The dike slowed the water before it reached the soil.
- ② At another bank, people used a wide dirt dike with grass on it. The wide dike gave water a longer path, and grass roots helped hold the dirt. Both dikes protected soil, but they were made differently.
- ③ Wind can also blow loose soil away. Near a field, one row of shrubs blocked some wind close to the ground. A row of trees blocked wind higher up. Both windbreaks slowed wind, but the plants were different sizes.

2 ANSWER WITH EVIDENCE Use the passage

1 How did both dikes help protect soil at the banks?

2 What is one way the rock dike and the dirt dike with grass were different?

3 How were the shrub windbreak and the tree windbreak alike and different?

3 YOUR TURN Your own words

Choose a place where wind could blow soil away. Write exactly two sentences that describe two different windbreak designs and compare how they work.

PART 1 • READ AND MARK

Underline each solution that slows wind or water. Number the solutions 1 through 4 so you can compare what each one uses. Accept any marking that follows this job and points at the right text.

PART 2 • ANSWERS

#	QUESTION	ANSWER
1	How did both dikes help protect soil at the banks?	Both dikes slowed water so it would not wash soil away.
2	What is one way the rock dike and the dirt dike with grass were different?	The first dike was made of low rocks. The other was wide dirt with grass growing on it.
3	How were the shrub windbreak and the tree windbreak alike and different?	Both slowed wind. Shrubs blocked wind close to the ground, while trees blocked wind higher up.

PART 3 • YOUR TURN (SAMPLE ANSWER)

At a playground hill, I would plant a row of shrubs to slow wind near the ground. I would also plant trees to slow wind higher up, so both designs help keep soil on the hill.

Accept two realistic windbreak designs, such as shrubs, grass, or trees, and a clear comparison. The response should explain that both designs slow wind and should name a difference in the designs or where they block wind.