Grade 2 | SCIENCE

WEEK 20 • PRACTICE WORKBOOK • DAYS 96–100

Read the matching lesson in the Week 20 Student Textbook first. Write each answer on the line below its question. Day 100 is answered on your own.

Day 96: How Wind and Water Move Sand and Soil

Wind or water?

What happened	Wind or water?
Sand piles up into a long hill behind the beach.	____
Storm waves wash part of a beach away.	____
Soil from a bare riverbank slides into the river after heavy rain.	____
Dust blows off a dry, bare field.	____

1. Fill in the table: write wind or water for each event.

   Answer:

2. How can waves change a beach during a storm?

   Answer:

3. Why does a bare riverbank lose more soil than a bank covered with plants? Explain.

   Answer:

Day 97: Solutions: Sea Oats, Sand Fences and Shorelines

Coast solutions

Solution	What it is made of
Sea oats	Living grass plants
Sand fence	Thin wooden slats
Seawall	Concrete, wood or rock
Living shoreline	Oyster shells and marsh grass

1. How do sea oats hold a dune in place?

   Answer:

2. What can happen to the sand in front of a seawall when waves hit the wall?

   Answer:

3. Give one reason a town might choose a living shoreline instead of a wall.

   Answer:

Day 98: Comparing Solutions

Bay Town's shore is wearing away (an example made up for this lesson)

Choice	Does it slow erosion?	Good for plants and animals?	Cost
Build a seawall	Yes, behind the wall. Sand in front of it can wash away.	No. It covers the shore where animals live.	$$$
Build an oyster reef and plant marsh grass	Yes. It slows the waves and gets stronger as it grows.	Yes. It gives homes to oysters, fish and birds.	$$
Do nothing	No. The shore keeps wearing away.	For now, but the shore is lost over time.	No cost now

1. Which choice in the table is best for plants and animals?

   Answer:

2. Which choice costs the most?

   Answer:

3. Which choice would you pick for Bay Town? Give two reasons from the table.

   Answer:

Day 99: Hands-On: Test Two Solutions

1. Which solution did you put on Slope A? How is it like sea oats?

   Answer:

2. Name two things you kept the same so the test was fair.

   Answer:

3. Which slope lost less sand? Use your counts as evidence.

   Answer:

Hands-on task: Test two solutions on a sand slope

1. Make two sand slopes the same way: put the same amount of damp sand in two trays with sides, and prop up one end of each tray on the same book.
2. Slope A: push short pieces of dry grass, pine straw or toothpicks into the sand in rows, like sea oats. Slope B: stand a row of craft sticks across the middle of the slope, a little apart, like a fence.
3. Predict: which slope will lose less sand?
4. Pour 1 cup of water slowly from the top of each slope, the same way each time.
5. Scoop up the sand that washed to the bottom of each tray with a spoon. Count the spoonfuls and write them in the table.

Slope	Solution	Spoonfuls of sand that moved
A	Plant rows	____
B	Stick fence	____

My prediction and what happened:

Day 100: Independent Check: Comparing Solutions to Erosion

Kim's test results (an example made up for this lesson)

Slope	Spoonfuls of sand that moved
Bare sand	9
Plant rows	3
Stick fence	5

Answer on your own. An adult may read the questions aloud but should not give the answers.

1. Which slope lost the most sand?

   Answer:

2. Which solution worked best in Kim's test? Use the numbers as evidence.

   Answer:

3. Kim's town wants to protect a dune where shorebirds nest. Should the town build a rock wall or plant sea oats? Explain with one reason about living things.

   Answer: