



Water Carves the Land

Cross-Curricular Focus: Earth Science

The coastlines of North America have a beautiful, but unusual shape. The ocean waves are responsible for weathering away bits of soil, rock, and sand wherever the water meets the land. Some beaches change more than others. Those that experience severe storms or frequent winds change the most. Water carries the sediment, or sand, soil and rocks, and drops it along another part of the coast.

A **bay** is formed when wears away the land in a natural curve. This creates a body of water that has a wide opening to the sea, but is partly enclosed by land. The waters of a bay are usually calm.

Ocean waves aren't the only water sources that pick up and redeposit sediment. River systems are made up of many different rivers. They join up on their journey toward the ocean. They all eventually join a major river that will take them all the way to the ocean. One example of this is the Mississippi River system. It eventually empties into the Gulf of Mexico. At the mouth of the river, deposits of sediment build up over time. This forms a large land area called a **delta**.

Sometimes people change the path that water naturally follows. Man-made lakes are created by building dams. The lake that forms is called a **reservoir** and stores the region's fresh water supplies. In some areas, the dam may also use the force of gravity to make electricity. Water rushing from a high place to a low one turns huge turbines, or wheels, creating and storing electricity for the region's power system. Water from reservoirs can also be used in irrigation projects that help farmers get enough water to grow crops.

Water often shapes our land. Humans also shape and control the water sources of the Earth.

Name: _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is sediment?

2) What happens when sediment builds up over time?

3) What is responsible for the unusual shape of a coastline?

4) What is an example of people changing the way water flows?

5) What is one benefit of building a dam?
