

Sediments are also made of plant and animal remains. When a plant dies, its roots, stems, and leaves rot on the ground. The rotting plant parts break up into bits and pieces. In swamps and marshes, rotting plant remains can pile up several feet thick over hundreds of years.

Along the shore, seashells and other animal remains pile up in shallow waters. In some parts of the world, where the ocean water is warm, small animals called coral form hard skeletons from salts they take out of the water. When a coral animal dies, the hard skeleton is left. Other coral animals attach themselves to the old skeletons. Over hundreds of years these tiny skeletons pile up, making a structure called a reef. The reef can be hundreds of feet thick and miles long.

How do sediments move?

Sediments formed by weathering are often moved hundreds of miles away from where they were formed. The carrying away of sediments is called **erosion**. Most sediments are moved by running water in streams and rivers. Over millions of years rivers and streams are able to erode entire mountains!

As the water in a stream or river flows downstream, it carries different-sized sediments. The heavier sediments—boulders, sand, and gravel—are slowly pushed along the bottom of the riverbed. It can take hundreds of years for large boulders to make their way down from the mountaintop to the river's mouth several hundred miles away.

Lighter sediments, including plant remains, silt, and clay, float in the moving water. The floating sediments are suspended in the water. The mixture of water and floating sediments is called a **suspension**. In deep places of the river where the water slows down, the suspended sediments slowly start to sink and eventually settle to the bottom.

Sediments are also moved by the wind. In deserts, the wind pushes sand around continuously to reshape sand dunes. When volcanoes erupt, thousands of tons of ash and dust are

sent into the air. These sediments can be carried halfway around the world by winds in the air! Eventually, as the winds lessen, the ash and dust settle on the surface of the earth.

SEDIMENTS	
Sediment	Description
Boulder	Formed from mechanical weathering of rock. Pieces are 6 inches to many feet in diameter. Pieces may be rounded or have pointed edges.
Gravel	Formed from mechanical weathering of rock. Pieces are 1/8 to 6 inches in diameter. Pieces may be rounded or have pointed edges.
Sand	Formed from mechanical weathering of rock. Pieces can be barely visible or up to 1/8 inch in diameter. They loosely stick together when wet.
Silt	Formed from chemical weathering of rock. Individual pieces are not visible. They stick together when wet and form mud. Pieces float in moving water, making water cloudy.
Clay	Formed from chemical weathering of rock. Individual pieces are not visible. They are more than 10 times smaller than silt pieces. When dry, clay is powder. The pieces stick together when wet and form mud. Pieces float in moving water, making water cloudy.
Plant Remains	Made of pieces of plant roots, stems, leaves, fruits, and flowers. Pieces have many sizes and are usually dark brown or black. Pieces float in moving water. Thick layers form muck.
Animal Remains	Made of seashells, tiny skeletons, bones, or teeth.
Salts	Formed from the evaporation of ocean water.