

Land

The crust of the earth is not one solid surface. Instead, it is broken into huge pieces, called **plates**. The **continents** are the visible parts of the plates. The other parts of the plates are under the ocean.

Scientists believe the ocean floor is moving very slowly. This is called **seafloor spreading**. Seafloor spreading causes the continents to move very slowly. This is called **continental drift**. Scientists use this theory, called **plate tectonics**, to explain how the earth is changing and how landforms, such as mountains, are created.

Seafloor spreading happens when the seafloor splits apart, usually because of volcanic activity. The magma pushes up, through the mantle, and causes the seafloor to move apart. This causes the continents to move. When the magma cools, it forms underwater mountain ranges.

Seafloor spreading can cause large earthquakes. California is known for its earthquakes. Some scientists believe that many, many years from now, plate movement will cause the western part of the United States to slowly break apart and drift away.

On the continents, land takes on many shapes. Water, weathering, erosion, and plate movement create many different **landforms**: mountains and hills, valleys and canyons, plateaus and plains.



Soil is the top layer of the crust. Soil is a mixture of organic matter (decaying plants and animals) along with rock particles, water, and air. Plants grow in soil.

Answer the Following

1. How do scientists explain changes in the earth? _____

2. How are landforms related? _____

3. What usually causes seafloor spreading? _____
4. Name one way that earthquakes can be caused. _____
5. What is the relationship between seafloor spreading and continental drift? _____

