



# Plate Tectonics Classroom Activity



The theory of plate tectonics explains the origins of most of the major features of the earth's surface. According to this theory, the earth has an outer shell made up of about 30 rigid pieces called tectonic plates. These plates move because they are on a layer of rock that is very hot. The continents are on these plates, and therefore, when the plates move so do the continents. The plates continue to move, sometimes causing earthquakes or volcanoes.

## SYNOPSIS

Students will learn about plate tectonics through a hands-on activity.

## OBJECTIVES

Students will be able to:

- describe Pangaea
- explain the theory of plate tectonics

## VOCABULARY/CONCEPTS

- plate tectonics
- Pangaea

## MATERIALS

- scissors
- glue or tape
- copy of world map (see following page)
- piece of paper for students to glue "Pangaea Recreated"

## PROCEDURE

1. Show the students the diagram of Pangaea. Tell them that scientists hypothesize that this is how the earth looked 200 million years ago.
2. Hand out a copy of the world map to each student.
3. Tell the students to cut out the continents, as they are today, and then fit the continents together to recreate Pangaea.
4. Have the students glue or tape their Pangaea onto a piece of paper and write "Pangaea Recreated" on the top.

## CHECK FOR UNDERSTANDING

The following questions can be used to guide the discussion:

- What is plate tectonics?
- How does plate tectonics affect your life in California?
- Will California be in the same place thousands of years from now?

## EXTENSION

- Have the students research which plate they live on and in which direction it is moving.
- Using the continental plate cut-outs, they can create a diagram of how the continents will be arranged in the future.

# WORLD MAP

