

Plates on the move

Name: _____ Date: _____

When the Earth formed billions of years ago, it was very, very hot. Slowly, it cooled and the outside of the Earth became hard and rocky while parts of the inside remained hot. This hard and rocky surface is broken into large sections and several smaller ones. These sections are called **tectonic plates** and they move! They move very, very slowly—about as fast as your fingernails grow. These plates move because of the hot, moving layer beneath them.

The tectonic plates are thick in some areas and thin in other areas. The thick parts are called continents, which include different countries. The thin parts of the plates form the ocean floor.

Plates can move in many different directions and at different speeds. Two plates that are next to each other can move in three different ways at the plate boundaries.

Plates can move apart

Pressure that builds up in the middle of the Earth can push two plates and cause them to spread apart. This plate movement is called '**divergent**'. This usually happens under the ocean because the plate is thinner there.

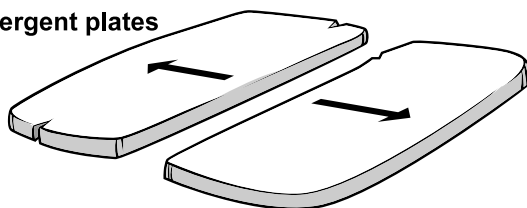
Plates can push together

Pressure can cause two plates to push together. This plate movement is called '**convergent**'. Over a very long time, this pushing can create mountains.

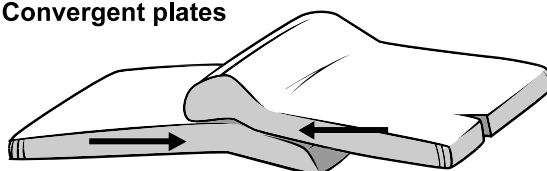
Plates can slide past each other

Plates can move past each other in opposite directions, or they can move in the same direction at different speeds. The plates are pushed together strongly so, as they move past each other, a lot of pressure builds up. An earthquake happens when this pressure is released. This plate movement is called '**transform**'.

Divergent plates



Convergent plates



Transform plates

