

There are three different types of plate tectonic fault boundaries. A fault boundary is an area where two pieces of crust (plates) meet, and movement occurs.

A transform boundary is where two plates become stuck and shift horizontally. Energy is released, causing earthquakes.

Volcanoes form at convergent and divergent boundaries. A convergent boundary is when two plates collide. When one of the plates is a piece of dense ocean crust, the ocean crust will sink into the mantle and become magma. This is called a subduction zone and often leads to volcanoes. The Ring of Fire is a famous area of subduction zones forming a ring around the Pacific Ocean.

Two ocean and continental plates can also push together forming mountains. The Himalayan Mountains are examples of two continental plates meeting. The Himalayan Mountains continue to grow taller each year.

At a divergent boundary, two plates spread away from each other. Trenches and volcanoes form. This often occurs on the ocean floor and is called seafloor spreading. Seafloor spreading creates a new ocean floor, consisting of cooled lava.

During your upcoming assessment, you will view a picture of a volcano and decide whether a convergent or divergent boundary is responsible for the volcano in the picture. You will be graded on your ability to support your answer with scientific details about convergent and divergent boundaries.