

# What Are Plate Boundaries?

The Earth is like a giant puzzle made up of huge pieces called tectonic plates. These plates fit together, but they are always moving very slowly, just a little bit every year! There are three main ways these plates move and interact with each other:

## 1. Divergent Boundaries

At divergent boundaries, two plates are moving away from each other. Imagine tearing a piece of paper in half! When the plates pull apart, magma (hot melted rock) comes up from below the Earth's surface and fills in the gap. This can create new land, like underwater volcanoes or even new islands!

## 2. Convergent Boundaries

At convergent boundaries, two plates are pushing toward each other. It's like when two cars crash! When these plates collide, one plate can push up over the other. This can create mountains, or if one plate goes beneath another, it can cause earthquakes or even volcanoes to form!

## 3. Transform Boundaries

At transform boundaries, the plates slide past each other sideways. It's a bit like rubbing your hands together. When they move, they can get stuck for a while, and then suddenly, they can slip! This slipping can cause earthquakes, which are when the ground shakes.

## How Do These Movements Affect the Earth?

The movements of these tectonic plates can create a lot of natural events:

- **Earthquakes:** When plates grind against each other, it can cause sudden shakes.
- **Volcanoes:** When plates pull apart or push together, they can cause magma to escape, forming volcanoes.
- **Mountains:** Plates pushing into each other can create really tall mountains!
- **Ocean Trenches:** Deep valleys in the ocean can form where one plate goes beneath another.

So, the movements of tectonic plates shape our Earth's landscape and cause many changes, making our planet interesting and dynamic!