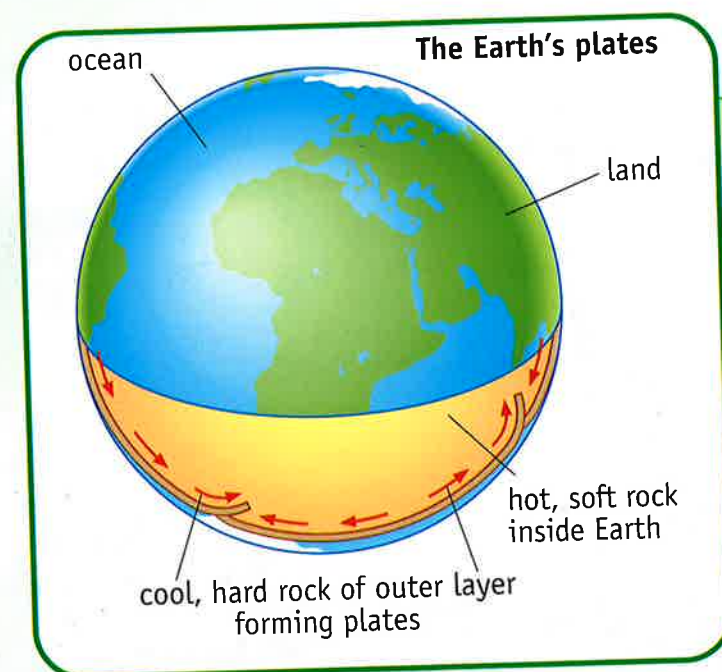


# What causes a tsunami?

Tsunamis usually happen when giant chunks of land at the bottom of the ocean drop down as the result of an **earthquake**. Millions of tonnes of seawater move in to fill the gap. This causes a series of waves on the surface of the ocean – a bit like the ripples that spread out when you drop a stone into a pond or lake.

## Earth movements

The outer layer of the Earth is made of solid rock. On mountain tops it can be bare, on deserts it may be covered with sand, and in oceans it is covered with seawater. Incredibly, this rock is always moving, although it does this very slowly. Deep inside the Earth it is so hot that the rock is melted into a sticky liquid. The cooler, lighter rock of the surface floats around on top of this liquid in enormous chunks called **plates**.



*As the Earth's plates move, they push and slide against each other. Sometimes the plates stick and then one suddenly slips down, causing an earthquake.*

## Other causes of tsunamis

All tsunamis start when massive amounts of seawater are suddenly moved. Sometimes the **lava** in the Earth spurts out at gaps or thin spots in the plates. This is what we call a **volcano**. When underwater volcanoes explode, they destroy rocks around them and this can start tsunamis.

Tsunamis can also be started when large amounts of rock or ice on mountains suddenly break free and fall into water. Tsunamis would even happen if a large meteorite (a piece of rock from space) plunged into an ocean.

*In 1883, the Krakatoa volcano in Indonesia erupted. The whole island collapsed and caused 35-metre high tsunamis that sped towards neighbouring islands, killing 36,000 people.*

