



# Year 4 Earthquakes

## Key vocabulary

tremor	An involuntary, quivering movement.
earthquake	A sudden, violent shaking of the ground, causing much destruction, as a result of movement in the Earth's crust.
aftershock	A smaller earthquake following the main shock of a large earthquake.
tectonic plates	Very large sections of rock that make up the Earth's crust that split the Earth into different parts.
plate boundary	The place where two tectonic plates meet.
friction	The action of one surface rubbing against another surface.
tsunami	A long, high sea wave caused by an earthquake.
seismic waves	A vibration that runs through the Earth after an earthquake.
magnitude	The great size or extent of something.
Richter Scale	A numerical scale used to show the magnitude of an earthquake. The more destructive earthquakes tend to have magnitudes between 5.5 and 8.9.

## Why do Earthquakes happen?

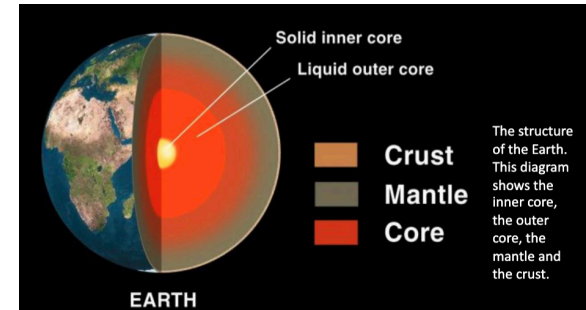
The Earth crust is made up of parts called tectonic plates that fit together. However, some parts slide underneath each other.

The molten or melted rock in the Earth's mantle moves. This can make tectonic plates in the thin crust move as well. Each year plates move a few centimetres.

Earthquakes happen in places where two plates move and mainly affect areas where two plates meet (tectonic plate boundaries).

When plates slide past each other, the plates stick, pressure builds up, and the plates slip. The friction eventually goes away when the plates slip past each other in a sudden movement, causing an earthquake.

## The Structure of the Earth



## Tectonic Plate Boundaries

There are seven major plates and lots of smaller plates. Some plate boundaries are on land and some are in the ocean. New Zealand experiences earthquakes because it sits on a plate boundary.

