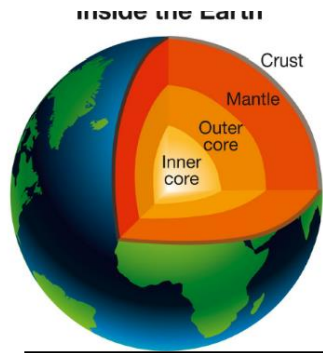


The layers that make up the Earth



**Earthquakes!
Year 3**

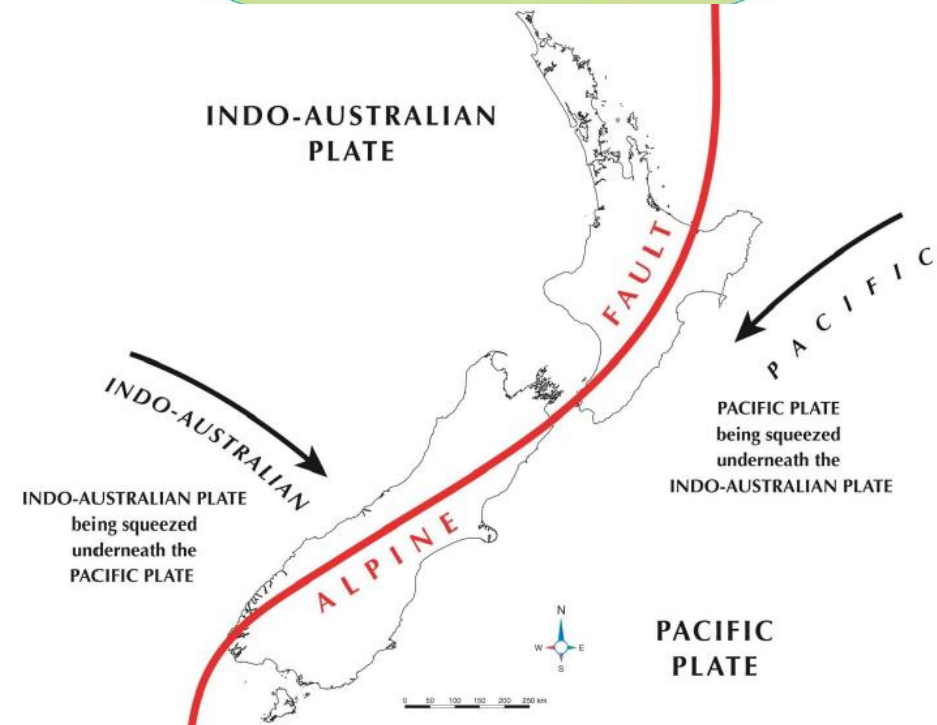
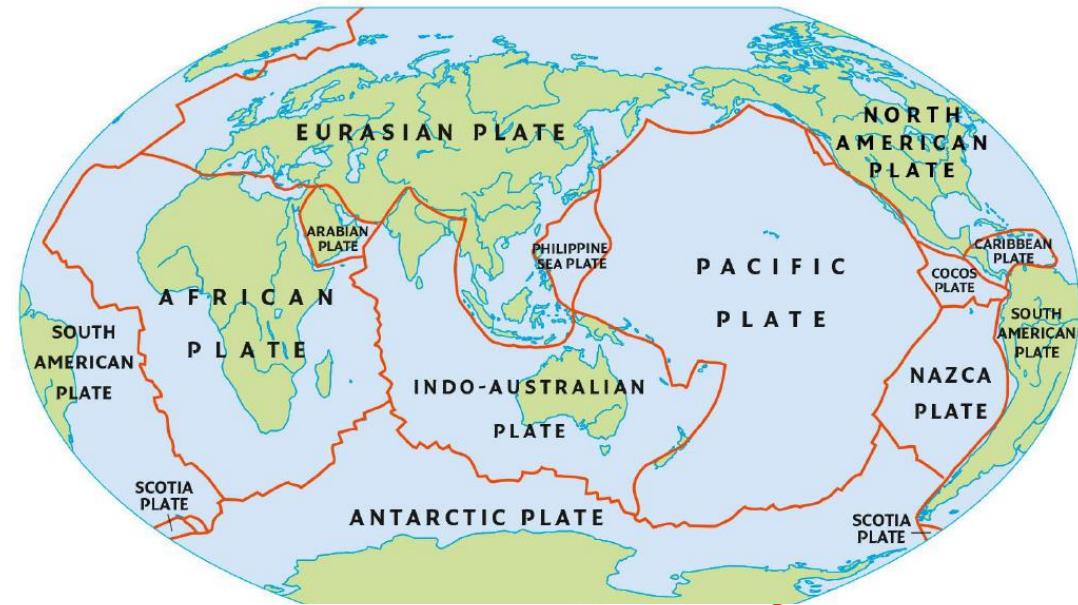
Plate movements

- 1) **Some plates are moving apart** – North American plate and the Eurasian plate. Earthquakes and eruptions occur here.
- 2) **Some plates are pushing into each other** – Nazca plate and south American plate. Here you get earthquakes and volcanoes.
- 3) **Some plates are sliding past each other** – Pacific plate and North American plate. Here you get earthquakes but no volcanoes.

Key Words	
Crust	The thin outer layer of the Earth, made of rock.
Continental Crust	This is made of lighter rock and forms the continents.
Oceanic Crust	The crust under the oceans.
Core	The inner layer of the Earth, made mainly of iron plus a little nickel.
Mantle	The middle layer of the Earth, between the crust and the core.
Lithosphere	The harder outer part of the Earth's surface; it is broken into large pieces called plates which are moving slowly around.
Focus	The 'centre' of an earthquake.
Epicentre	The point on the ground directly above the focus of an earthquake.
Seismic Wave	Wave of energy given out in an earthquake, it shakes everything.
Aftershock	A smaller earthquake following the main shock of a large earthquake.
Plates	The Earth's surface is broken into large pieces, like a cracked eggshell; the pieces are called plates.
Tectonic Plates	Underneath the Earth's plates is a weaker layer of partially melted rock called tectonic plates.
Earthquake	The shaking of the Earth's crust caused by rock movement.
Richter Scale	The magnitude of an earthquake is measured on the Richter scale.
Tremor	A relatively minor seismic shaking or vibrating movement that often come before larger earthquakes.
Magnitude	The amount of energy an earthquake gives out is called its magnitude.

A map to show the fault line (plate line) in New Zealand.

A map to show plate boundaries on the Earth's crust.



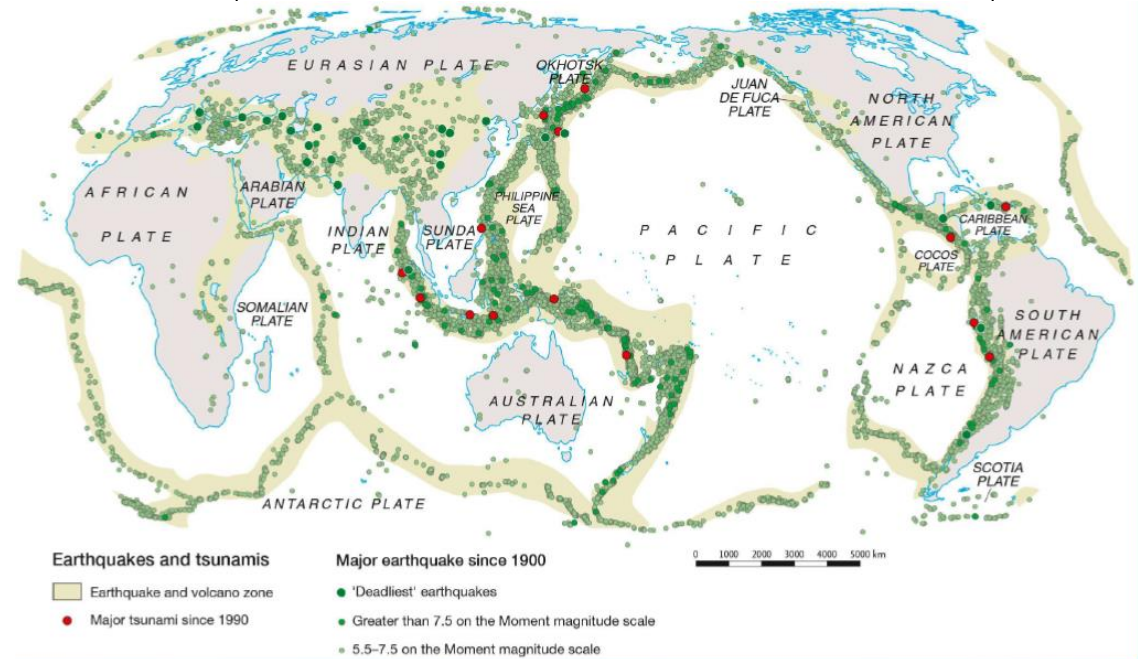
Facts and Information:

The earth's crust is 8 to 65 km thick.

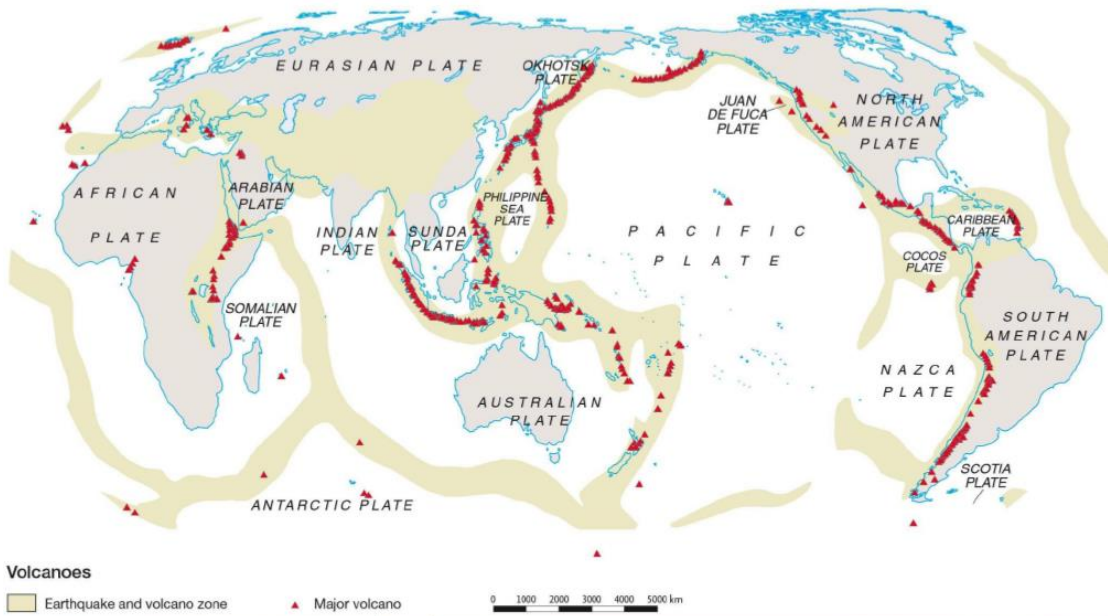
An earthquake is caused by rock suddenly shifting.

The amount of energy an earthquake gives out is called its magnitude

A map to show major earthquakes and tsunamis since 1900.



A map to show volcanoes.



The 5 largest earthquakes in the world.

Bio Bio, Chile – 9.5 – 22/5/1960

Southern Alaska – 9.2 – 28/3/1964

Sumatra, Andaman Islands – 9.1 – 26/12/2004

Tohoku, Japan – 9.1 – 11/3/2011

Kamchatka, Russia – 9.0 – 4/11/1952