



A natural hazard is a natural process which could cause death, injury or disruption to humans, property and possessions.

Earth's structure and movement:

Structure - Crust, Lithosphere, Asthenosphere, Mantle, Outer Core, Inner Core.

Convection Currents – magma in the mantle moving in a circular direction.

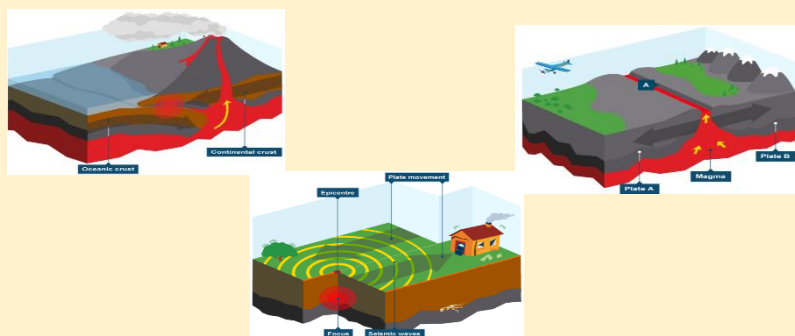
Plate margin/boundary – where two plates meet.

Conservative – two plates moving side by side.

Constructive – two plates move apart.

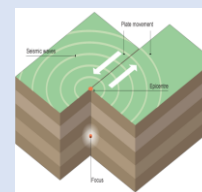
Destructive – the oceanic plate sinks beneath the continental plate.

Collision – two plates of similar density collide – make fold mountains.



Earthquakes are caused when two plates become locked causing friction to build up. From this stress, the pressure will eventually be released, triggering the plates to move into a new position. This movement causes energy in the form of seismic waves, to travel from the focus towards the epicentre. As a result, the crust vibrates triggering an earthquake.

- The point at which pressure is released
- is called the **FOCUS**.
- The point directly above the focus
- is called the **EPICENTRE**.
- **SEISMIC WAVES** (energy waves)
- travel out from the focus.



Volcanic Eruptions

There are two main types of volcano:

Composite volcanoes are the most common type of volcano. They can have violent eruptions and can grow bigger as layers of thick lava and ash harden on top of each other. Mount Etna in Sicily, Italy, is an example of a composite volcano.

Shield volcanoes do not have such violent eruptions. These volcanoes tend to have gentle slopes and their runnier lava spreads and hardens over a wider area. Mauna Loa in Hawaii is an example of a shield volcano.

Most volcanic eruptions are caused by pieces of the Earth's crust, called tectonic plates, moving towards each other.

Some volcanoes, like Mauna Loa in Hawaii are caused by hot spots in the Earth's crust. These do not erupt violently and lava usually flows slowly out of them.

Eruptions from volcanoes can be very dangerous. They can produce:

- pyroclastic flows - fast moving clouds of hot ash, gas and rock
- ash clouds - small pieces of rock and glass that can be carried in the air for many kilometres
- volcanic bombs - large bits of very hot rock blown out of a volcano.