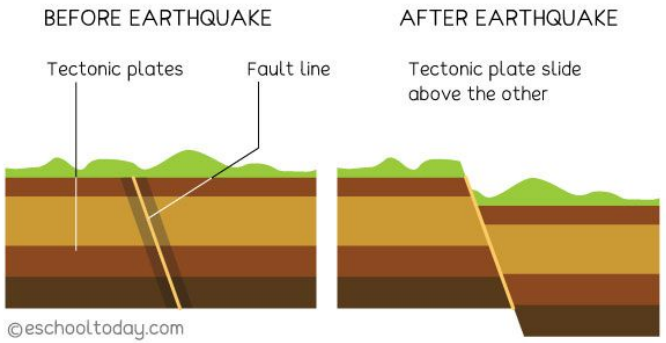
| Y4 Geography - Earthquakes and Volcanoes - Knowledge Organiser |

Key Vocabulary

Earthquake	A sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action.
Epicentre	Part of the earth's surface directly above the focus of an earthquake.
Fault	A fault is a fracture along which the blocks of crust on either side have moved relative to one another parallel to the fracture.
Seismic waves	A wave that travels through the Earth.
Tectonic Plates	Earth's outer layer is made up of large, moving pieces called plates. All of Earth's land and water sit on these plates. The plates are made of solid rock..
Crater	A volcanic crater is a roughly circular depression in the ground caused by volcanic activity. It is typically a bowl-shaped feature within which occurs a vent or vents.
Eruption	When magma is released from a volcano
Lava	Lava is a liquid, that cools into rock, which is a solid.
Magma	Hot fluid or semi-fluid material below or within the earth's crust from which lava and other igneous rock is formed on cooling.
Volcano	Hot fluid or semi-fluid material below or within the earth's crust from which lava and other igneous rock is formed on cooling.

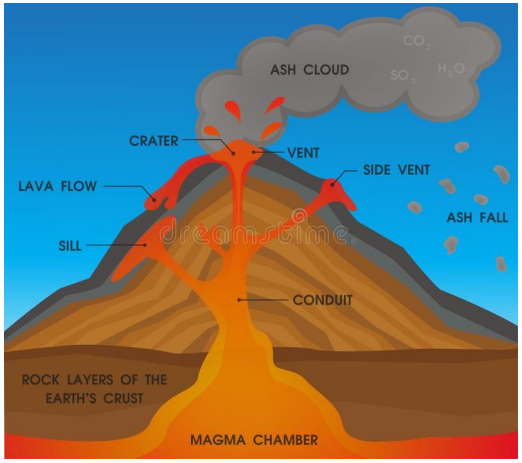
Earthquakes

An earthquake is the shaking and vibration of the Earth's crust. The Earth's crust is actually made up of giant puzzle pieces called **tectonic plates.** Tectonic plates are constantly shifting as they drift around on the viscous, or slowly flowing, **mantle** layer below. This non-stop movement causes stress on Earth's crust. When the stresses get too large, it leads to cracks called **faults**. When tectonic plates move, it also causes movements at the faults. An earthquake is the sudden movement of Earth's crust at a fault line.



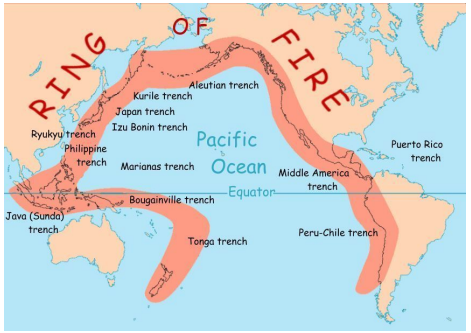
Famous Volcanoes

Mount Etna
Mount Vesuvius
Krakatoa
Mount Fuji
Mount St. Helens



Volcanoes

Volcanoes are formed when **magma** rises through cracks or weaknesses in the Earth's crust. Pressure builds up inside the Earth. When this pressure is released, e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption. The **lava** from the eruption cools to form new crust. Over time, after several eruptions, the rock builds up and a volcano forms.



Ring of Fire

The **Ring of Fire** is a major area in the basin of the Pacific Ocean where many earthquakes and volcanic eruptions occur.