

Volcanoes and Earthquakes – Knowledge Organiser

Key Vocabulary

Core - The core is at the centre of the Earth. There is a solid inner core and outer liquid core of molten metal.

Crater - The mouth of a volcano.

Crust - The surface layer covering our planet.

Earthquake - A violent movement of parts of the Earth's surface.

Epicentre - The point on the Earth's surface at the centre of an Earthquake.

Erupt - To suddenly burst out causing lava to explode out of the earth's surface.

Lava - Molten, hot rock flowing from a volcano.

Molten - Hot, melted rocks.

Magma - Extremely hot, liquid rock.

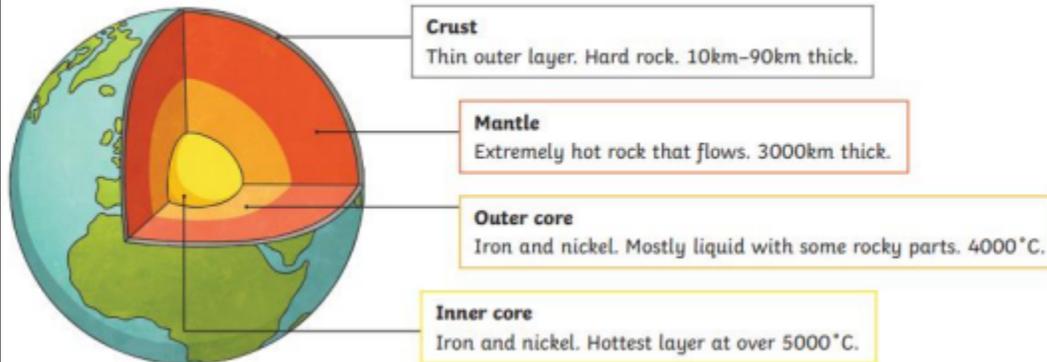
Mantle - Under the crust is the mantle forming about half of the Earth.

Seismic waves - An elastic wave in the earth produced by an earthquake or other means.

Tectonic plates - The earth's crust is made up of large areas called tectonic plates that join together.

Volcano - An opening or rupture in the Earth's crust through which lava, ash and gases escape.

Layers of Earth



Magnitudes



Shockwaves spread out from the epicentre (the strongest point of the earthquake). Magnitude, measured on a Richter scale, measures how strong an earthquake is. 1 is a small tremor and 9 is catastrophic!

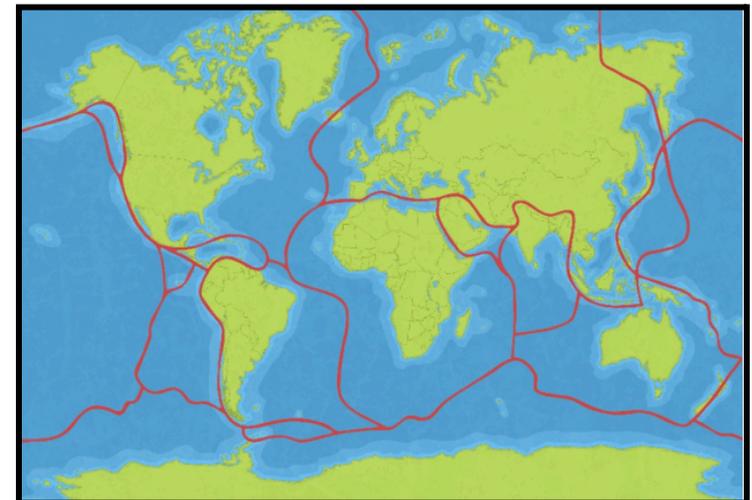
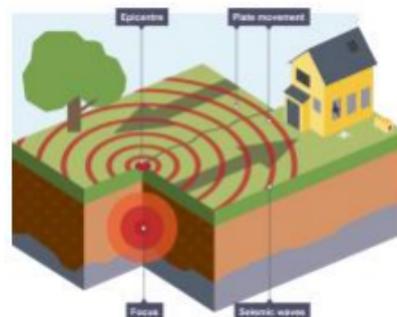
What are tectonic plates?

The Earth's surface is called the crust. It is made up of different rocky sections called tectonic plates, which fit together like a puzzle covering earth.

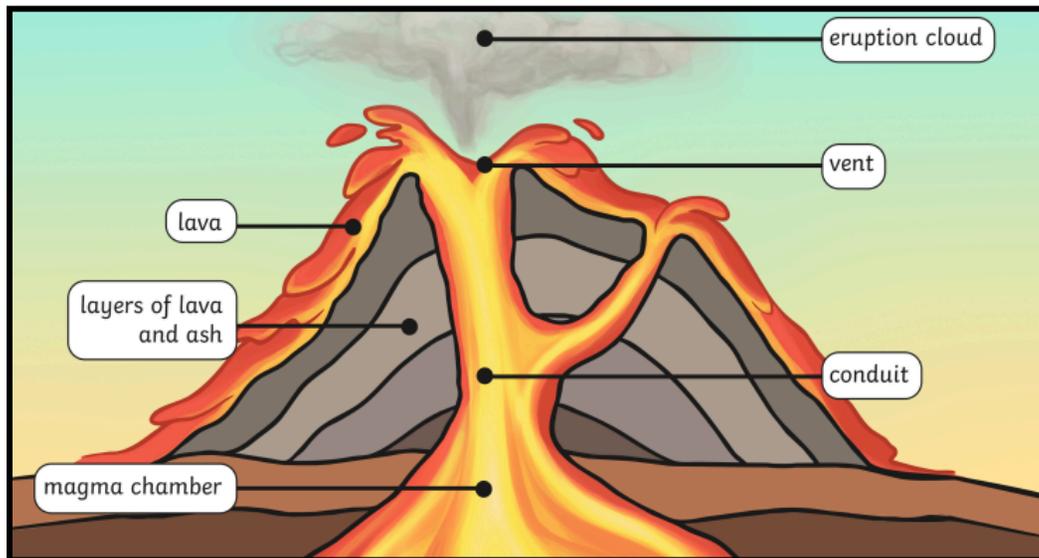
Tectonic plates are located all over the world. They cover the Earth's inner layers and act as a sort of shell below the ground and the sea. There are seven major tectonic plates that cover most of the Earth

Earthquakes

- Earthquakes are caused when the earth's tectonic plates suddenly move.
- Most earthquakes occur near the tectonic plate boundaries.
- Earthquakes can cause lots of damage to roads, buildings and property.
- The power of an earthquake is measured using the Richter Scale.



Inside a Volcano



Significant Earthquakes

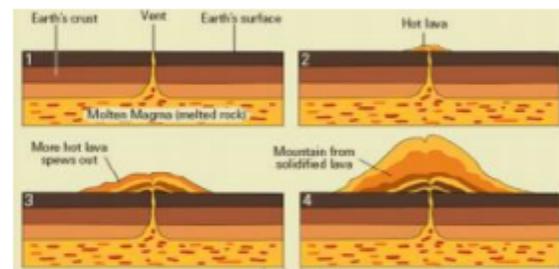
			
2004 Indian Ocean	1906 San Francisco	2010 Haiti	1995 Japan

Key Volcanos

Volcano	Where	Key Information
Mount Fuji	Japan	Last erupted in 1707
Mount Etna	Sicily, Italy, Europe	Has been erupting regularly through the 20 and 21 century.
Eyjafjallajökull (E5)	Iceland, Europe	Famously erupted in 2010 causing severe disruption due to the huge ash cloud.
Mount Vesuvius	Naples, Italy, Europe	The last eruption was in 1944. Most famous eruption was in AD 79 which destroyed Pompeii
Kīlauea	Hawaii	Kilauea is one of the world's most active volcanoes

Volcanoes

Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing magma to sometimes erupt through it.



- **Active volcanoes** have erupted in the last 10 000 years.
- **Dormant volcanoes** haven't erupted in the last 10000 years but may erupt again.
- **Extinct volcanoes** aren't expected to erupt again.

