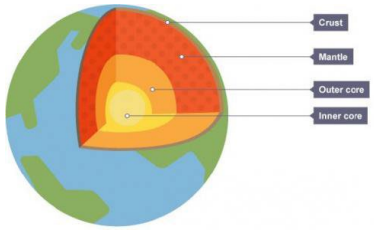
Year 6
Extreme Earth
Knowledge Organiser

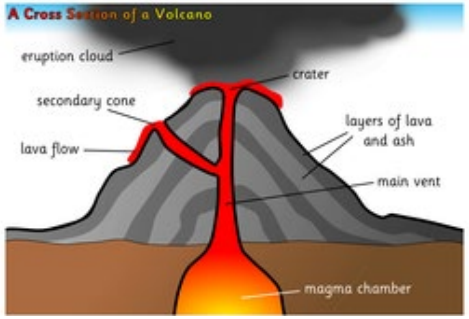
Cross-section of the earth



Key Facts-Volcanoes

The land on Earth is constantly moving.
Tectonic plates 'float' on the earth's mantle. They move slowly, too slow for us to notice
It takes millions of years for the land to move a significant amount.

Cross section of a volcano

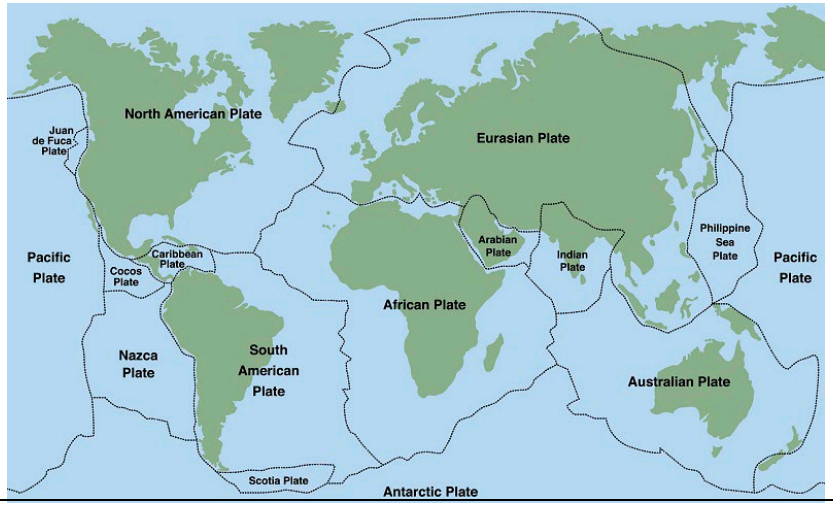


The movement of tectonic plates is most evident where the plates meet- the boundaries
There are three main types of boundaries: convergent boundaries, divergent boundaries, transform boundaries

Volcanoes are usually located where tectonic plates meet. Volcanoes are openings in the Earth's surface. When they are active ash, gas and hot magma escape when volcanoes erupt.

Earthquakes involve the powerful movement of rocks in the Earth's crust. The rapid release of energy creates seismic waves that travel through the earth.

Tectonic Plate Map



Key Vocabulary

Volcano	A volcano is a very deep hole in the Earth's top layer that can let out hot gases, ash and lava.
Earthquake	Earthquakes are a sudden and quick shock of the Earth's surface. They usually occur on the edges of large sections of the Earth's crust called tectonic plates. Pressure slowly builds up where the edges are stuck and, once the pressure gets strong enough, the plates will suddenly move causing an earthquake.
Tectonic plate	Earth's outer layer is made up of large, moving pieces called plates.
Magma	Molten, or hot liquefied, rock located deep below the Earth's surface is called magma.
Lava	Lava is hot, liquefied rock that flows from a volcano or other opening in the surface of Earth.
Volcanic Ash	Volcanic Ash is defined as very small solid particles ejected from a volcano during an eruption.
Magma chamber	A magma chamber is a large pool of liquid rock beneath the surface of the Earth. The molten rock, or magma, in such a chamber is under great pressure, and, given enough time, that pressure can gradually fracture the rock around it, creating a way for the magma to move upward.
Active/ dormant/ extinct	An **active volcano** is a volcano that has had at least one eruption during the past 10,000 years. A **dormant volcano** is an active volcano that is not erupting, but supposed to erupt again. An **extinct volcano** has not had an eruption for at least 10,000 years and is not expected to erupt again in the future.