KNOWLEDGE ORGANISER

Topic: BANG!
Year: 4
Autumn Term

Interesting Facts

What is an earthquake?

An earthquake is the shaking and vibration of the Earth's crust due to movement of the Earth's plates (plate tectonics). Earthquakes can happen along any type of plate boundary. Earthquakes occur when tension is released from inside the crust. Plates do not always move smoothly alongside each other and sometimes get stuck. When this happens pressure builds up. When this pressure is eventually released, an earthquake tends to occur.

- Six Italian scientists were convicted of manslaughter (killing someone without planning or being hateful) and sent to prison for not predicting (knowing it was coming and warning people) the 2009 L'Aquila earthquake in which 309 people died. They argued against their cases and won, so were eventually not sent to prison.

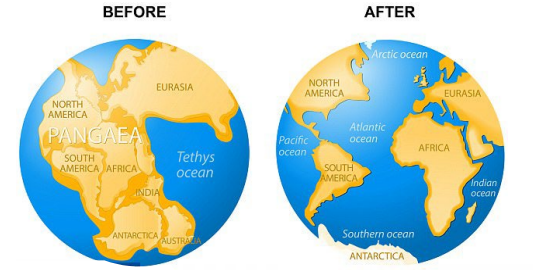
How are volcanoes formed?

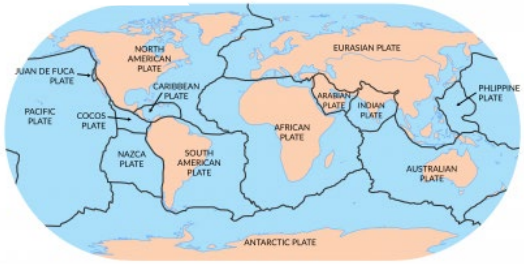
1. Magma rises through cracks or weaknesses in the Earth's crust.
2. Pressure builds up inside the Earth.
3. When this pressure is released, e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption.
4. The lava from the eruption cools to form a new crust.
5. Over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

Some of the world's most famous volcanoes are:

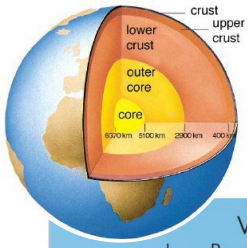
- Mount Vesuvius, Pompeii near Naples Italy
- Krakatoa, Indonesia
- Mount St. Helens, Washington, USA
- Mount Tambora, Indonesia
- Mauna Loa, Hawaii
- Eyjafjallajökull, Iceland
- Mount Pelée, Martinique, Caribbean

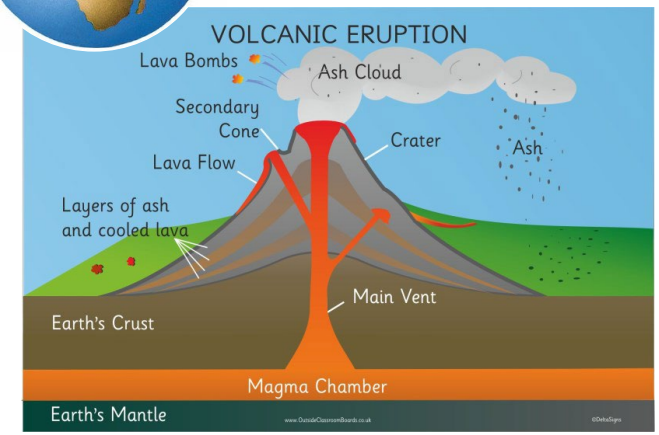
Tectonic Plates





Layers of the Earth





Key Vocabulary

Crater	A bowl-shaped cavity in the ground at the top of a volcano. They are often created during volcanic eruptions.
Crust	The outer most layer of rock, covering the Earth.
Earthquake	A sudden violent shaking of the ground.
Epicentre	The point on the Earth's surface vertically above the focus of an earthquake.
Eruption	When lava, rocks and smoke explodes from a volcano.
Fault line	A break in the Earth's surface.
Lava	Hot molten rock that has erupted from a volcano.
Magma	Molten rock beneath the Earth's crust.
Plate Boundaries	The location where two plates meet.
Seismic waves	A wave of energy created by an earthquake.
Seismograph	An instrument that measures and records details of earthquakes, such as force and duration.
Tectonic plates	The Earth's crust is divided into a small number of plates and much of the Earth's seismic activity occurs at the boundaries of these plates .
Vibration	A continuous quick, slight shaking movement caused by an earthquake.
Volcano	A mountain or hill with a crater or vent through which lava flows.