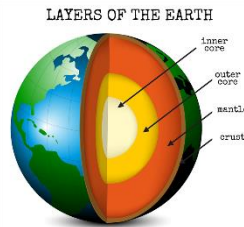
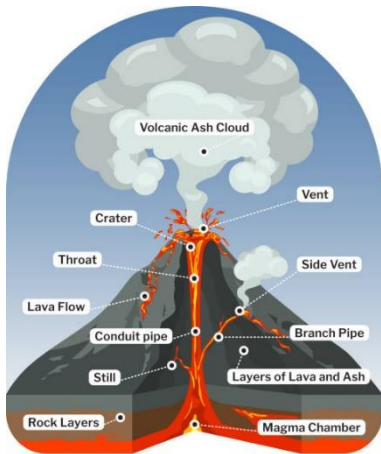


Year 3

Spring

Geography - Volcanoes and Earthquakes

In this topic children will study the layers that make up the earth and develop an understanding of tectonic plates and how these relate to volcanoes and earthquakes. Children will label parts of a volcano and will be able to explain how volcanoes are made and how they are classified. Children will compare the earthquake map to the tectonic plates to find similarities.



Key Knowledge

- A volcano is a mountain or a large hill through which molten rock can escape. Volcanoes are classified into three categories: active, dormant, and extinct.
- 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.
- Machines called seismographs measure the power of an earthquake at its epicentre on a scale called the Richter scale. Another measure is the Mercalli scale, and this is based on people's observations during an earthquake.

Key Vocabulary

Active volcano - A volcano that is erupting or likely to erupt.

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.

Dormant volcano - Seen as a 'sleeping volcano', it is a volcano that has not erupted for a while but technically could in the future.

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.

Extinct volcano - a volcano that has not erupted for a long time and is unlikely to erupt at all in the future.

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.

Pompeii - A famous Roman city destroyed by a volcano. In 79 AD.

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.

Key Questions

How are volcanoes formed?

Where are some of the world's most famous earthquakes?

What causes an earthquake?

