

## Team 2 - Knowledge Organiser – Extreme Earth

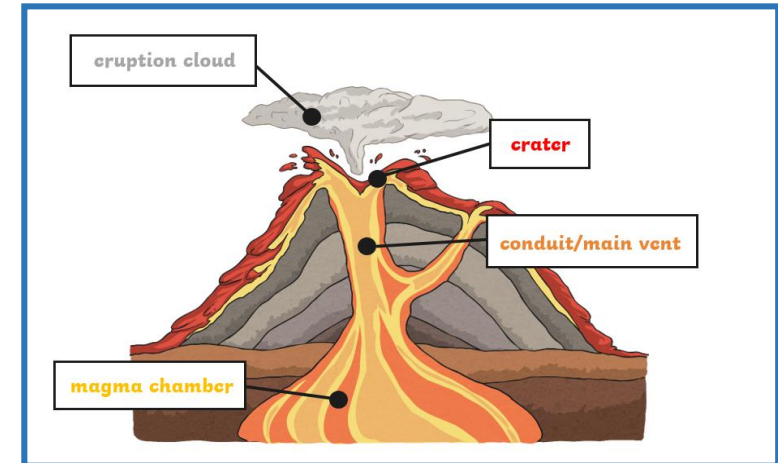
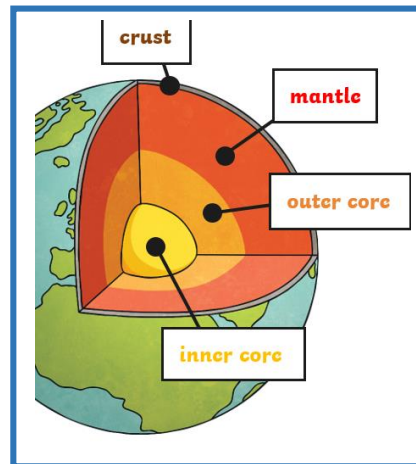
**What you should know already:** Identify the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Use geographical vocabulary to refer to key physical features of a place (coast, mountain, ocean etc.)

### Top Ten Vocabulary

Tectonic Plates	The earth's crust is made up of large areas called <b>tectonic plates</b> that join together.
Magma	Extremely hot, liquid rock
Volcano	Made when pressure builds up inside the earth. This affects the earth's crust causing <b>magma</b> to sometimes <b>erupt</b> through it.
Erupt	To suddenly burst out causing lava to explode out of the earth's surface.
Active volcano	A volcano that has erupted in the last 10,000 years
Dormant volcano	A volcano that hasn't erupted in the last 10,000 years but may erupt again.
Extinct volcano	A volcano not expected to erupt again
Earthquake	Earthquakes are caused when the earth's tectonic plates suddenly move.
Tsunami	A tsunami is a giant wave caused by a huge earthquake under the ocean.
Ring of Fire	The Ring of Fire is an area around the edges of the Pacific Ocean where 75% of volcanoes and 90% of earthquakes occur.

### Synopsis

This term we look at a particularly exciting and key aspect of physical geography which focuses on volcanoes and earthquakes! We will be looking at how and why these natural phenomena occur, and will explore the human geography relating to the ways these affect people and the environment. This will link to our Science topic of 'Rocks and Soils' in which we further explore the layers of the earth, as well as our DT, in which we will look at earthquake proof buildings and then design our own model building. In Art, we will be continuing this study of the environment by focusing on the work of land artist Andy Goldsworthy and will make our own collaborative sculpture out of natural materials.



### Key Knowledge

Underneath our feet there are 4 main layers of the earth: the **inner core** which is the hottest layer, the **outer core**, the **mantle** and the **crust** or outer layer. The earth's **crust** is broken up into huge areas called **tectonic plates** which float on top of the mantle. These tectonic plates move in different ways and cause **volcanoes, earthquakes** and **tsunamis**.

Volcanoes are formed when pressure builds up inside the earth and pushes magma up through the crust. Volcanoes can be **active, dormant** or **extinct**. There are different types of volcano including: composite, cinder and shield. **Earthquakes** are formed when the **tectonic plates** push against each other. You can measure the strength of an earthquake using a **seismograph**. **Tsunamis** are giant waves caused by an **earthquake** under the ocean.