

**What I should already know:**

Builds on the unit Marvellous Mountains year 3. Year 4 I am warrior! (Romans)  
Geography-Local Area history study-Year 3-Mining .

**Key Knowledge and skills- Physical Geography**

Volcanoes are formed when magma rises to the surface of the Earth which causes bubbles of gas to appear in it. This gas can cause pressure to build up under the crust, causing it to eventually erupt. The lava which flows out cools forming a new layer of rock. Each time this happens the volcano gets larger.

The highest mountain on Earth is Mount Everest which is 8848m high and located in the Himalayas mountain range.

79AD – Mount Vesuvius erupted and destroyed the cities of Pompeii and Herculaneum.

Mount Etna - is the highest and most active volcano in Europe. Located in Sicily it has been growing for about 500,000 years and still erupts regularly

Earthquakes occur where tectonic plates meet and push against each other. Tectonic plates are pieces of the rocky outer layer of the Earth known as the crust.

Make physical comparisons with Mount Etna, Mount Vesuvius and Barrow Hill to include location, age and last know eruption.

Locate on a world map the volcanoes and discuss where they are most likely to occur and why.

**Unit outcome**

Children will be able to talk about current and past volcanic activity. They will know what cause them and that earthquakes are also a natural disaster often linked to Volcanic eruptions.

Children will visit Barrow Hill Nature reserve as part of their fieldwork. They will identify the mineral calcite at the disused quarry that is linked to volcano. They will link prior learning from year 4 on Tribal Tales- earliest evidence of human presence at the site were two burial chambers (barrows) found on the northern slopes of Barrow Hill, believed to date back to the Bronze Age, 2000BC to 700BC.

**Vocabulary**

<b>Mount Everest</b>	Tallest mountain in the Himalayas
<b>Pompeii</b>	The ancient Roman city of Pompeii was located in what is now the Campania region of Italy, southeast of Naples.
<b>Etna</b>	On the east coast of Sicily, Italy, in the Metropolitan City of Catania
<b>Eruption</b>	An explosion of steam or lava from a volcano.
<b>Magma</b>	Hot fluid or semi-fluid material below or within the Earth's crust from which lava is formed.
<b>Lava</b>	Hot, molten or semi-fluid rock that erupts from a volcano, or solid rock resulting from cooling of this.
<b>Volcano</b>	A landform where molten rock erupts through the surface of the Earth.
<b>Mountain</b>	A large landform, rising above the surrounding land, which is formed by tectonic movement.
<b>Tectonic plates</b>	The Earth's outer shell is made up of huge slabs of moving rock called tectonic plates. Volcanoes, earthquakes and mountain ranges tend to occur along the edges of these plates.
<b>Earth's crust</b>	The crust is the thin outer layer of the Earth's surface.
<b>Eruption</b>	An explosion of steam or lava from a volcano.
<b>Earthquake</b>	A sudden violent shaking of the ground, typically causing great destruction, as a result of movements within the earth's crust or volcanic action.
<b>Dormant</b>	A volcano that is temporality inactive. It has not erupted in 10,000 years but is expected to erupt again.
<b>Calcite</b>	A white or colourless mineral consisting of calcium carbonate. It is a major constituent of sedimentary rocks such as limestone.
<b>Fieldwork</b>	Practical work conducted by a researcher in the natural environment, rather than in a laboratory or office.

**Barrow Hill - Dudley's very own Volcano**

It is just 2,500m from the High Arcal Lane / Himley Road epicentre of the Dudley earthquake of September 23, 2002 which measured 5.0 on the Richter Scale.

**Mount Etna-Located in Sicily****Mount Etna-Located in Pompeii****Key Questions**

Why do volcanoes occur?  
What happens when a volcano erupts? What is Mount Etna and where is it located?  
Where are the Himalayan mountains located?  
Where would you find tectonic plates? How do tectonic plates cause earthquakes?  
What happens when an earthquake occurs? Where in the world are earthquakes most likely?  
Can you compare any physical features of volcanoes?