

Year 4 Knowledge Organiser – What lies beneath the Earth?

What will we be learning?

- What lies beneath the Earth?
- What is inside a volcano?
- What can I find out about real volcanoes?
- How do earthquakes affect people and places?
- What could you do if an earthquake happened?
- What would it be like to live near a volcano?

Glossary

dormant: *a dormant volcano is a volcano, like Kilimanjaro, that has not erupted for a long time*

epicentre: *where an earthquake starts and is felt most strongly*

tsunami: *a huge, powerful wave caused by an earthquake*

Key knowledge

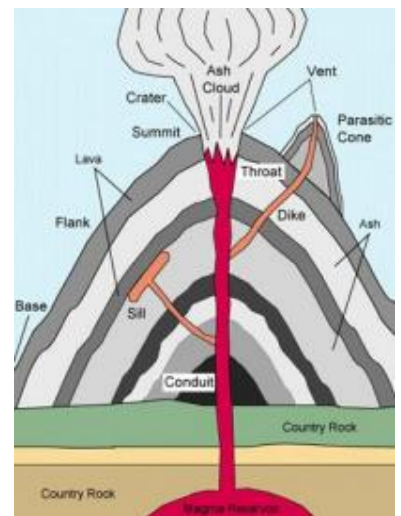
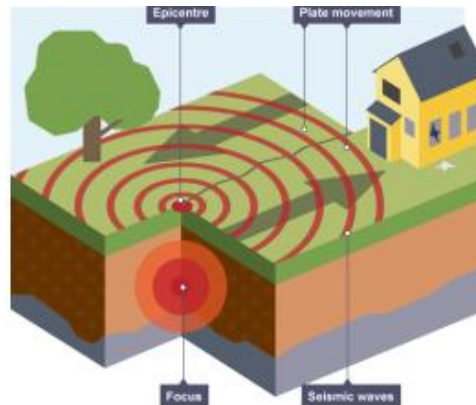
The Earth is made up of layers. The top layer, the Earth's crust, consists of large slabs of rocks, called plates.

The plates move as the hot mantle flows beneath them. The movement of the plates causes earthquakes and leads to volcanoes erupting.

Earthquakes are measured on the Richter scale. They can cause devastating damage to buildings, roads and land.

When volcanoes erupt they spew out lava. This is a very hot liquid that destroy anything in its path.

Event	Date
Mount Vesuvius, Italy	AD 79
Eruption of Krakatoa volcano	26 August, 1883
San Francisco, USA	April 18, 1906
The most powerful earthquake ever recorded in Valdivia, Chile	May 22, 1960
Mount St Helens, USA	May 18, 1980
Earthquake in Haiti	Jan 12, 2010



Key Facts

How are volcanoes formed?	<ol style="list-style-type: none"> 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 new crust. 5. Over time, after several eruptions, the rock builds up and a volcano forms.
What causes 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

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	each other and sometimes get stuck. When this happens, pressure builds up. When this pressure is eventually released, an earthquake tends to occur Volcanoes.
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