

## Knowledge organiser – Volcanoes and Earthquakes

### What will we be learning?

- The structure of the Earth.
- Features of a volcano.
- Famous volcanoes and earthquakes.
- Effects of volcanoes and earthquakes.
- Preparing for an earthquake.
- What it's like living near a volcano.

### Key facts

Famous volcanoes:

Soufrière (St Lucia, North America), Eyjafjallajökul (Iceland, Europe), Popocatepetl (Mexico, North America), Vesuvius (Italy, Europe), St Helens (USA, North America), Etna (Italy, Europe).

### 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.



Place names	Geographical terms and processes	Locational terms
Great African Rift Valley Haiti Iceland Japan Mauna Loa Pacific Ring of Fire	crater disaster dormant eruption magma tsunami	epicentre plate boundary

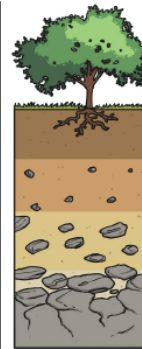
### Glossary

**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 Vocabulary	
<b>cumulonimbus cloud</b>	Large thunderstorm clouds.
<b>erupt</b>	To suddenly burst out causing lava to explode out of the earth's surface.
<b>fossils</b>	The remains of plants or animals that lived a long time ago which can be found deep in the earth.
<b>magma</b>	Extremely hot, liquid rock.
<b>tectonic plates</b>	The earth's crust is made up of large areas called <b>tectonic plates</b> that join together.



Layers of Soil	
<b>humus</b>	Rotting dead leaves and animals.
<b>topsoil</b>	Plant's roots grow here. Very few rocks.
<b>subsoil</b>	Rocks and stones. Full of nutrients. Tree roots may reach. <b>Fossils</b> .
<b>bedrock</b>	A mass of rocks. <b>Fossils</b> .

### Layers of Earth

- Crust**  
Thin outer layer. Hard rock. 10km–90km thick.
- Mantle**  
Extremely hot rock that flows. 3000km thick.
- Outer core**  
Iron and nickel. Mostly liquid with some rocky parts. 4000°C.
- Inner core**  
Iron and nickel. Hottest layer at over 5000°C.



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### Volcanoes

- Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing **magma** to sometimes **erupt** through it.
- Active volcanoes have **erupted** in the last 10 000 years.
- Dormant volcanoes haven't **erupted** in the last 10 000 years but may erupt again.
- Extinct volcanoes aren't expected to **erupt** again.

### Earthquakes

- Earthquakes are caused when the earth's **tectonic plates** suddenly move.
- Most earthquakes occur near the **tectonic plate** boundaries.
- Earthquakes can cause lots of damage to roads, buildings and property.