

Extreme Earth – Topic 2

Key Questions

Why does the ground move?

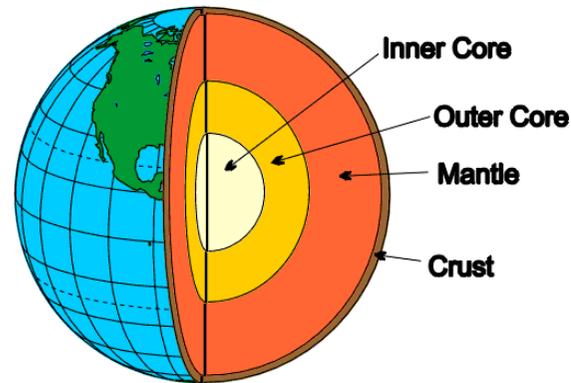
1. How is a volcano formed?
2. How are earthquakes created?
3. What happened to Pompeii in AD 79?
4. Can you name 3 volcanoes around the world?
5. What is the name of the longest fault line?
6. Why do we need earthquake proof buildings?
7. What are the features of an earthquake proof building?
8. What is a force?
9. Why do magnets attract or repel?
10. Name some magnetic materials.

The Earth

The Earth has three layers:

- The **crust** – at the very top (outside layer)
 - The **mantle** (in the middle)
- The **core** – at the centre of the Earth.

The Earth's crust is made up of huge slabs called **tectonic plates**, which fit together like a jigsaw puzzle.



**Earthquake
Damage!**



Earthquakes

The **tectonic plates** have edges. Sometimes as the different plates move together these edges can get stuck, but the plates keep moving. **Pressure** slowly starts to build up as the **tectonic plates** push against one another. Eventually the plates will suddenly move causing an **earthquake**.

Volcanoes

- A volcano is a very deep hole in the Earth's top layer that can let out hot gasses, ash and lava.
 - Volcanoes can be active, erupting and dormant.
- There are no volcanoes in the UK. The largest volcano in Europe is Mount Etna in Sicily (Italy).



Topic Tasks

Make your own model of a volcano. Can you make it erupt? Take videos or photos of your project.

What is the weather like where you live? Keep a diary of the weather over the next few weeks.

What extreme facts can you find out about the Earth? What are the weirdest facts?

Create a project about a famous volcanic eruption or earthquake.

Key Vocabulary

- Active** – a volcano that is having an eruption.
- Core** – the centre of the Earth
- Crust** – the top layer of our planet
- Dormant** – a volcano that is not active.
- Earthquake** – the shaking of the Earth's surface.
- Erupt** – to send out lava, rocks and ash in an explosion.
- Fault lines** – a break or fracture in the ground.
- Lava** – hot, liquified rock on the Earth's surface.
- Magma** – hot, liquified rock below the Earth's surface.
- Mantle** – part of the Earth's interior beneath the crust but above the core.
- Tectonic plates** – large moving pieces of the Earth's crust.
- Vent** – the opening where lava and ash flow from.
- Volcano** – an opening in the Earth's crust where lava flows.