Quivers, Quakes, Eruptions and Shakes

Key Vocabulary

Active volcano - a volcano that has erupted recently or is expected to erupt soon.

Core - the core is at the centre of the Earth. There is a solid inner core and outer liquid core.

Crater - the mouth of a volcano.

Crust - the surface layer covering our planet. There are two types of crust - oceanic and continental.

Dormant volcano – not an active volcano, but is capable of becoming active.

Earthquake - a violent movement of parts of the Earth's surface.

Epicentre - The point on the Earth's surface at the centre of an earthquake.

Eruption – a volcano erupts when it shoots out lava.

Extinct - a volcano which used to be active but will not erupt again

Fault line - a long crack in the surface of the Earth. Earthquakes usually occur along fault lines.

Lava - molten, hot rock flowing from a volcano.

Magma – a molten substance beneath the Earth's crust.

Mantle - under the crust is the mantle forming about half of the Earth.

Molten - hot, melted rocks.

Ring of Fire - area in the Pacific Ocean where many volcanoes erupt.

Seismic - relating to earthquakes or other vibrations of the earth and its crust.

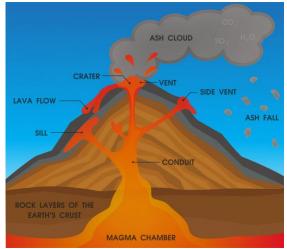
Tectonic plates - any of the several segments of the Earth's crust that move.

Tsunami - a long, high wave caused by an earthquake or disturbance of the land.

Volcano - an opening or rupture in the Earth's crust through which lava, ash and gases escape.

Quiz questions!

- 1. How are volcanoes formed?
- 2. What causes an earthquake?
- 3. What are the sections that the Earth's crust is divided into called?
- 4. What does the movement of tectonic plates cause?
- 5. What is a volcano that is soon to erupt called?
- 6. When magma shoots up from the Earth, what is it called?
- 7. Where in the world is the Ring of Fire?
- 8. Why are there so many volcanoes along the tectonic plate boundaries in the Ring of Fire?
- 9. Name some volcanoes in Europe.
- 10. How many layers of the Earth are there? Can you name them starting with the most inner layer?





Key concept

Making choices

Key question

Why do people choose to live near seismic areas?

<u>Fascinating Information!</u> Volcanoes

A volcano is a very deep hole in the Earth's top layer that can let out hot gasses, ash and lava. Many volcanoes are also mountains. Volcanoes have long vents that go all the way down through the Earth's first layer, the crust, to magma in between the crust and the mantle (the Earth's second layer). It's so hot there that rocks melt into liquid. This is called magma, which travels up through volcanoes and flows out as lava. There are three ways to describe a volcano and explain what it's doing: active, dormant and extinct. When a volcano erupts, magma comes up and out through the vents. Magma is called lava when it's outside the volcano. Some volcanoes are underwater. There are no volcanoes in the UK. The largest volcano in Europe is Mount Etna in Italy.

Earthquakes

The tectonic plates have edges and sometimes these edges, which are called fault lines, can get stuck, but the plates keep moving. Pressure slowly starts to build up where the edges are stuck and, once the pressure gets strong enough, the plates will suddenly move causing an earthquake.

Earth

The Earth has three main layers - the crust at the very top, then the mantle, then the core at the very middle of the planet. The Earth's crust is made up of huge slabs called tectonic plates, which fit together like a jigsaw puzzle. These tectonic plates slowly move over a long period of time.

Home Learning Ideas

- 1. Research some of the most famous volcanoes in the world.
- 2. You could make your very own volcano at home using baking powder, vinegar and red food colouring! Ask your parents first before researching how to do it!
- 3. Create some volcano artwork.
- 4. You might like to read the 'Disaster Strikes' series by Marlane Kennedy. The first book is called 'Earthquake Shock'

