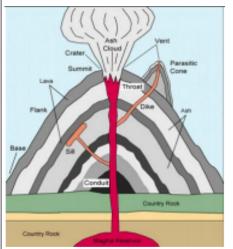
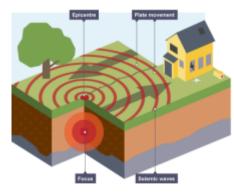
## **Volcanoes and Earthquakes**

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

Key Facts How are volcanoes formed?	Key Vocabulary	Definition
1. Magma rises through cracks or weaknesses in the Earth's crust.	mantle	The layer between the crust and the outer core of the earth.
2. Pressure builds up inside the Earth.	magma	Molten (liquid) rock beneath the earth's surface.
3. When this pressure is released, e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption.	volcano	A vent in the earth's surface from which lava and gases pour during an eruption.
4. The lava from the eruption cools to form new crust.	Active	A volcano that has erupted recently or is erupting now.
5. Over time, after several eruptions, the rock builds up and a volcano forms.	lava	Molten rock flowing from the vent of a volcano during an eruption.
((((,))))	eruption	The name of the process in which solids, liquids or gases are expelled through a vent in the earth's surface.





## Did you know...?

- The word volcano originally comes from the name of the Roman god of fire, Vulcan.
- The object with the most volcanic activity in our solar system is lo, one of Jupiter's moons.
- Covered in volcanoes, its surface is constantly changing due to the large amount of volcanic activity.
- Volcanic eruptions can send ash high into the air, over 30km (17 miles) abov the Earth's surface.
- Pumice is a unique volcanic rock (igneous) that can float in water.
- Scientists use the different speeds of seismic waves to locate the epicentre (point on the surface directly above where the earthquake originated) of earthquakes.
- The most powerful earthquake ever recorded on Earth was in Valdivia, Chile. Occurring in 1960, it had a magnitude of 9.5.