

# Y4 GEOGRAPHY KNOWLEDGE ORGANISER: CAN THE EARTH SHAKE, RATTLE AND ROLL?

## Key Words

<b>Eruption</b>	The ejection of rock and gas from a volcano.	<b>Lava</b>	Molten fluid rock that is ejected from a volcano and solidifies as it cools.
<b>Active volcano</b>	A volcano that has had an eruption in the last 10,000 years, and it is possible it may erupt in the future.	<b>Volcano</b>	A vent in the earth's crust where lava, steam and ash is ejected during an eruption.
<b>Dormant volcano</b>	A volcano that has not erupted in the last 10,000 years, but it is possible it may erupt in the future.	<b>Extinct volcano</b>	a volcano that has not had an eruption in the last 10,000 years and will not erupt in the future.
<b>Tsunami</b>	A series of waves of water caused by the movement of tectonic plates below the surface.	<b>Eruption</b>	The ejection of rock and gas from a volcano.
<b>Earthquake</b>	Movements, fractures and vibrations in the earth's crust as tectonic plates move.	<b>Richter scale</b>	A scale to measure the magnitude of an earthquake.
<b>Plate boundary</b>	The line where two tectonic plates meet.	<b>Tectonic plates</b>	A massive slab of rock that floats on top of the mantle of the earth.

## Key Ideas

- Our earth is dynamic and ever-changing. The moving structure of the earth's tectonic plates results in volcanoes and earthquakes at their boundaries. These have existed throughout geological time and there are many different types, all with their own physical geographical features. Many people choose to live near volcanoes and in earthquake zones, even though they can be life-threatening.
- The Ring of fire is the world's most active volcano and earthquake zone. The ring is 25,000 miles long with 452 volcanoes on it. It is an area on the boundaries of the Pacific Ocean. It follows the eastern side of Australia and Asia and the western side of North and South America.
- The rigid outermost shell of the earth ( the crust) is broken into tectonic plates. This structure is like a cracked egg. The cracked shell represents the thin crust, the white represents the hot magma in the mantle and the yolk represents the extremely hot core
- The tectonic plates move a little each year and this results in volcanoes and earthquakes at their boundaries (the cracks in the shell).
- Some people choose to live near volcanoes and earthquake zones. This can be for a range of reasons; the soil near volcanoes can be very good for growing crops, volcanoes can attract tourists, the geothermal energy can be harnessed and the minerals in lava can be mined. However, living in these areas can be very dangerous. Yet, some of the hazards have been overcome by science - allowing people to live more safely near them.

**A Cross Section of a Volcano**



