

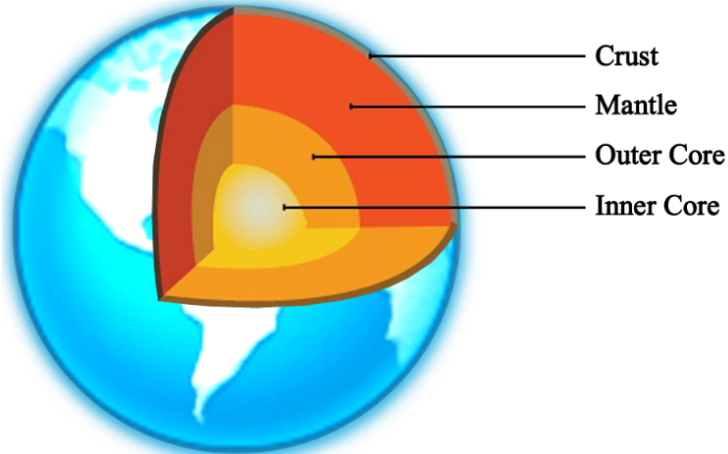


# Can the Earth Shake, Rattle and Roll? YEAR 4 GEOGRAPHY

## KNOWLEDGE MAT

### KEY KNOWLEDGE

#### Layers of Earth



#### Tectonic Plates

Most tectonic activity is along plate margins and the edge of continents. Some volcanoes form over hot spots in the mantle. The Ring of Fire is a region around much of the rim of the Pacific Ocean where many volcanic eruptions and earthquakes occur.



### KEY VOCABULARY

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

**Crater** - The mouth of a volcano.

**Crust** - The surface layer covering our planet.

**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.

**Erupt** - To suddenly burst out causing lava to explode out of the earth's surface.

**Lava** - Molten, hot rock flowing from a volcano.

**Molten** - Hot, melted rocks.

**Magma** - Extremely hot, liquid rock.

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

**Seismic waves** - An elastic wave in the earth produced by an earthquake or other means.

**Plate boundary** - the boundaries of tectonic plates.

**Richter scale** - uses a numerical system to measure the magnitude of an earthquake.

**Tectonic plates** - The earth's crust is made up of large areas called tectonic plates that join together.

**Tsunami** - a large wave caused by movements in Earth's outer layer, or crust, which move ocean water.

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



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## KEY KNOWLEDGE

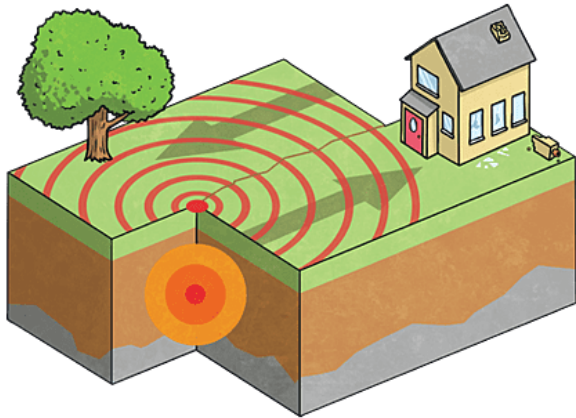
### Earthquakes

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.

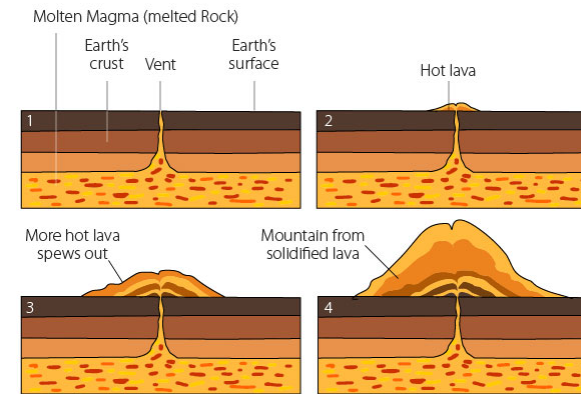
The power of an earthquake is measured using the Richter Scale.



## KEY KNOWLEDGE

### 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 10000 years but may erupt again.
- Extinct volcanoes aren't expected to erupt again.

### Fascinating Facts

Approximately 350 million people live within "danger range" of an active volcano.

Lava from a volcano can reach 1,250°C!



The word "volcano" comes from the Roman name "Vulcan".

The world's largest active volcano is Mauna Loa in Hawaii.

Volcanoes don't just occur on land.

