

How does the earth shake, rattle or roll?

Vocabulary

Definition

magma	Hot molten rock found in the Earth's mantle.
lava	Hot, molten rock that comes out of a volcano.
erode	Gradually worn away.
impermeable	Not allowing water is pass through. Also described as waterproof.
natural disaster	a natural event such as a flood, earthquake, or hurricane that can cause great damage to the earth, people and settlements.
plate boundary	The place where tectonic plates meet.
continental drift	The gradual movement of the continents across the earth's surface through time.

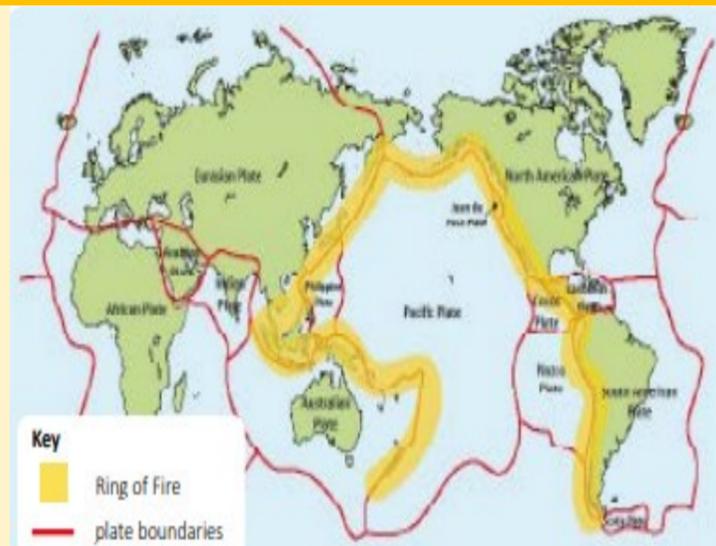
Earthquakes

Earthquakes are the sudden violent shaking of the ground. As the Earth's tectonic plates try to move past each other at plate boundaries they can get stuck. The pressure builds up so that when the plates eventually slip, a huge amount of energy is released causing an earthquake. Earthquakes can cause a lot of damage, especially to buildings and roads.



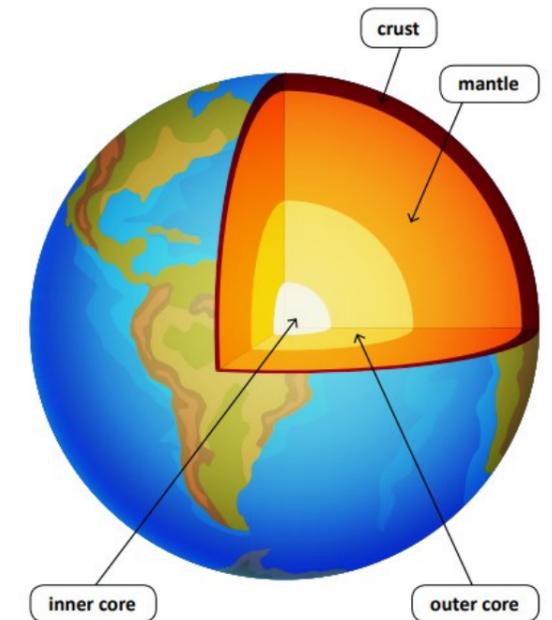
Plate Tectonics

The tectonic plates that make up the Earth's crust float on top of the mantle and are constantly moving. The places where tectonic plates meet are called plate boundaries. Tectonic plates can push together, pull apart or slide against each other. This movement at the plate boundaries can cause volcanic eruptions, earthquakes and tsunamis.



Structure of Earth

Crust	A thin layer of rock on the surface that is broken into large pieces called tectonic plates. The crust is the top layer of the earth that we live on.
Mantle	The mantle is made up of molten and semi-molten rock called magma.
Outer Core	A liquid layer of iron and nickel.
Inner Core	A solid metal (iron) ball, which is the hottest part of the Earth.



Volcanos

Volcanoes are mountains with vents at the top through which lava, gases and ash erupt. Volcanoes are classed as active, dormant or extinct. Active volcanoes are likely to erupt again. Dormant volcanoes might erupt again in the future. Extinct volcanoes will not erupt again.



Types of Rocks

	Sedimentary	Igneous	Metamorphic
How is it made?	Made from layers of mud and sand, called sediment, that have settled in water and have been squashed over a long time to form rock.	Made from cooled magma or lava.	Formed when existing rocks are changed by heat and pressure.
Uses	Chalk is soft and can be easily eroded. This makes chalk suitable for writing and drawing on blackboards.	Granite is very hard and impermeable. Granite is used for making kitchen work surfaces.	Marble is easy to carve and is not easily eroded, making it suitable for sculptures.
Examples	Chalk Sandstone	Granite Obsidian	Marble Slate