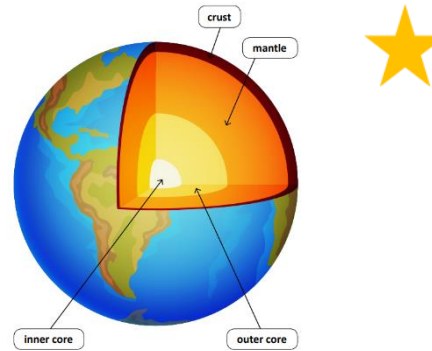


# Rocks, Relics and Rumbles

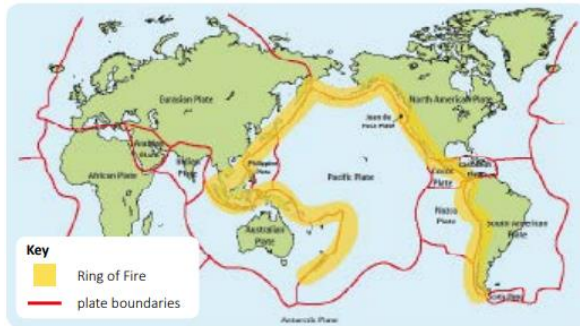
## Structure of Earth

Earth is made up of four layers. These are the crust, mantle, outer core and inner core. The crust is a thin layer of rock on the surface that is broken into large pieces called tectonic plates. The mantle is made up of molten and semi-molten rock called magma. The outer core is a liquid layer of metal. The inner core is solid metal, and the hottest part of the Earth.



## 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.



## Volcanoes

Volcanoes are mountains or hills with vents at the top through which lava, gases and ash erupt. There are four different types of volcano. These are shield, stratovolcano, cinder cone and lava dome. 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.



## 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.



## Tsunamis

A tsunami is a series of waves caused by a volcanic eruption or earthquake under the sea. As the waves near the shore, they become larger and can travel a long way inland, causing a huge amount of damage to buildings, belongings and people.



## Vocabulary

		lava	Hot, molten rock that comes out of a volcano	molten	Metal or rock that is in a liquid state because of great heat.
erode	Be gradually worn away.	liquid	A material that is runny, can be poured easily and takes the shape of its container	Ring of Fire	Area around the Pacific Ocean where many earthquakes and volcanic eruptions occur
impermeable	Not allowing water to pass through. Also described as waterproof.	magma	Hot molten rock found in the Earth's mantle.	Tectonic plate	A large, slow-moving piece of rock that makes up the Earth's crust