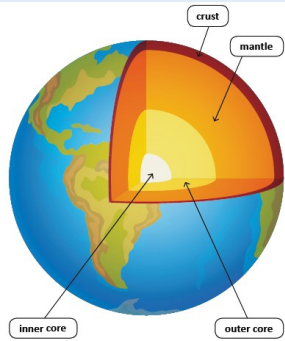


Year 3: Rocks, Relics and Rumbles

The features of Earth's layers, and an understanding of rock types, volcanic, tectonic and seismic activity.

WHAT?



The earth is made up of 4 layers:

Crust—thin layer of rock broken into tectonic plates

Mantle—molten and semi-molten rock

Outer core—liquid metal

Inner core—solid metal

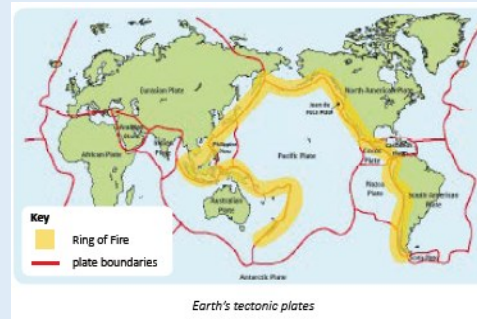


Plate Tectonics

Tectonic plates float on the mantle and are always moving. They meet at plate boundaries where they push, pull or slide past, causing volcanic eruptions, earthquakes or tsunamis.

GLOSSARY



erode - be gradually worn away



impermeable - Doesn't allow water to pass through



lava - hot, molten rock that comes out of a volcano



liquid - a material that can be poured and it takes the shape of its container



magma - hot, molten rock found in the mantle



molten - metal or rock in a liquid state due to heat



organic matter - dead or decaying plants and animals



solid - a material that doesn't flow and can be held



tectonic plate - a large, slow-moving piece of rock that makes up the Earth's crust



vent - an opening in the crust where lava can escape



volcanic eruption - the release of lava, gas, ash and rock out of a volcano



Ring of Fire - Area around the Pacific Ocean where many earthquakes and eruptions occur

Sedimentary rocks	Igneous rocks	Metamorphic rocks
sandstone	granite	marble
limestone	obsidian	slate

Types of Rock

There are 3 types of rock:

Sedimentary—made from layers of sediment (mud and sand)

Igneous—made from cooled magma or lava

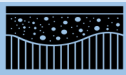
Metamorphic—made when existing rocks are changed by heat and pressure.

Rocks have different uses according to their properties.



Fossils

Fossils are the remains of living things, preserved in sedimentary rocks.



Soil - The material that covers the Earth's crust. It's made from organic matter, air and rock. There are 3 types: sandy, silty and clay.



Volcanoes

Mountains or hills with vents where lava, gases and ash can erupt. There are 4 types: shield, stratovolcano, cinder cone and lava dome. They are active, dormant or extinct.



tsunami damage



Tsunamis

A series of large waves caused by a volcanic eruption or earthquake under the sea. The waves can travel inland, causing damage.



Earthquakes

The sudden, violent shaking of the ground when lots of energy is released from tectonic plates which suddenly slip past each other after being stuck.



earthquake damage