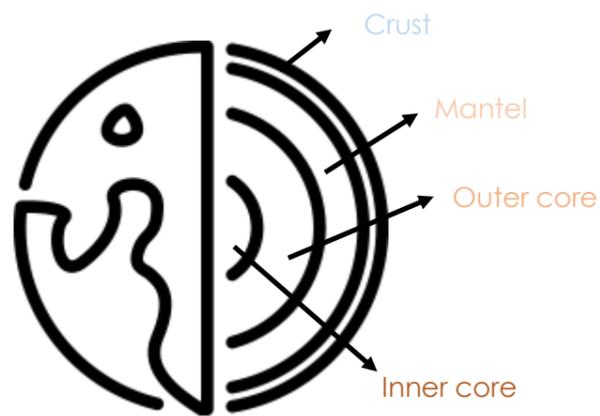
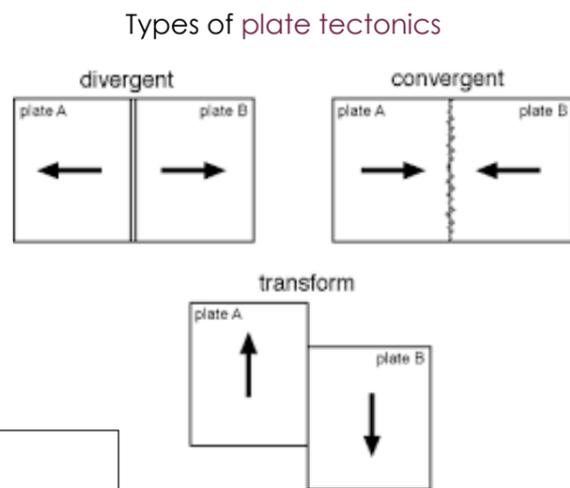


# Y3: 'Rocks, Relics and Rumbles' project knowledge organiser



The **Earth** is made up of 4 layers.  
 The **inner core** is solid metal and the hottest part of Earth.  
 The **outer core** is a liquid layer of metal.  
 The **mantel** is molten and semi-molten rock called magma.

The pushing, pulling and sliding of the **tectonic plate** boundaries are what causes natural disasters such as tsunamis, volcanic eruptions and earthquakes.

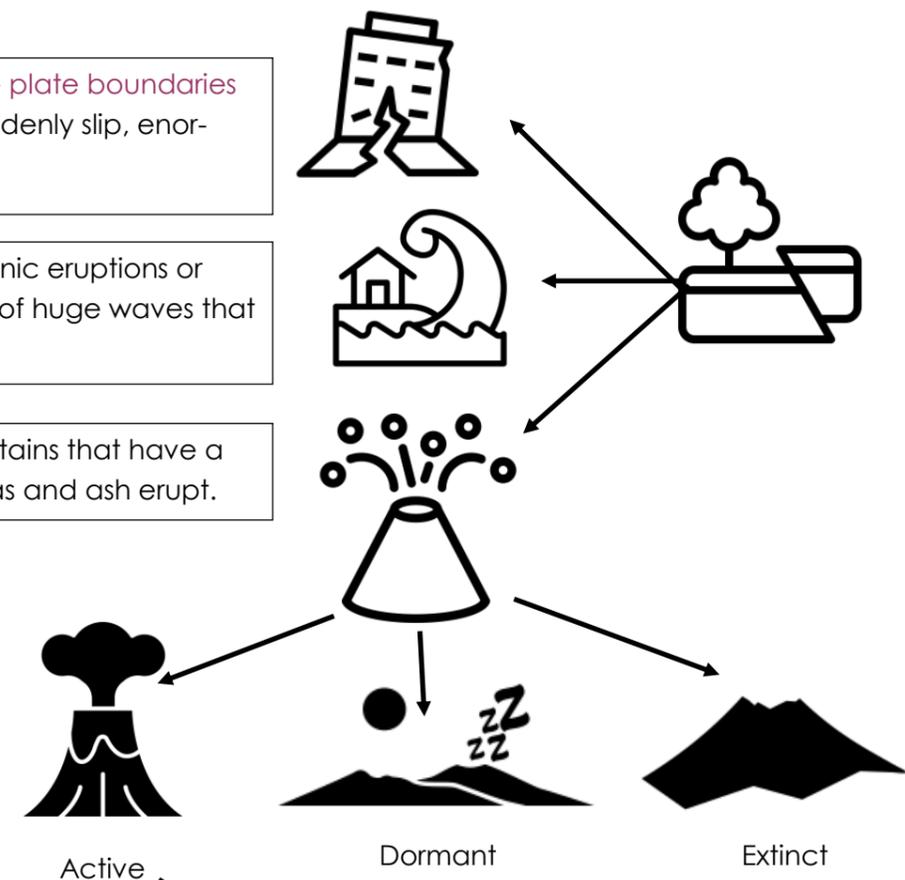


**Earthquakes:** Pressure at the **plate boundaries** build up and when they suddenly slip, enormous energy is released.

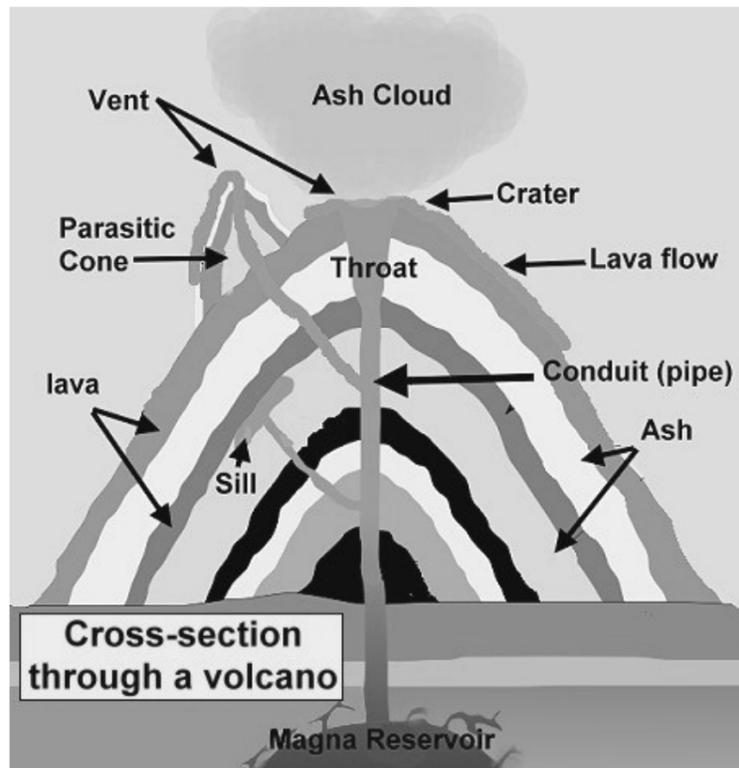
**Tsunamis:** Underwater volcanic eruptions or earthquakes cause a series of huge waves that can destroy buildings.

**Volcanoes:** These are mountains that have a vent which through lava, gas and ash erupt.

The Ring of Fire is the area around the Pacific Ocean where many eruptions and earthquakes occur at the **plate boundaries**.



Surviving a natural disaster		
Earthquake	Eruption	Tsunami
Have a pre-planned emergency plan and kit	Have a pre-planned emergency plan and kit	Have a pre-planned emergency plan and kit
Secure furniture in the house	Close all doors and windows- make airtight	Get to high ground as soon as possible
If outside, stay away from buildings	Turn off air-conditioning	Listen to emergency broadcasts
Get under heavy-duty furniture and cover your head	When outside, wear a mask	Stay away from buildings, roads and electricity



Mount Vesuvius is an active volcano in Pompeii, Italy.

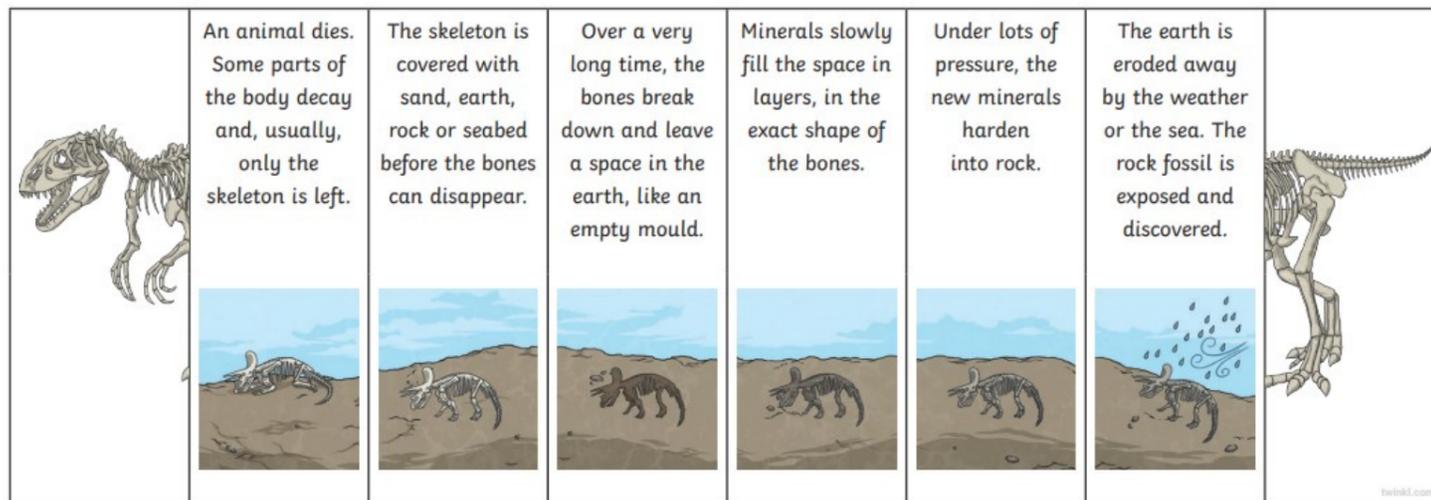
Vesuvius erupted on 24th August 79 A.D. It lasted two whole days.

Pliny the Younger wrote about the eruption, whilst escaping on a boat.

The remains of Pompeii were accidentally discovered 1700 years after the eruption.



# Y3: 'Rocks and soils' project knowledge organiser



Permeable is where a material is water absorbent.



Impermeable is where a material does not allow water through. We call this waterproof.



Durability is when a material is able to withstand wear, pressure, or damage.



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

Sedimentary rocks are made from layers of mud and sand that have settled in water and been squashed over a long period of time.

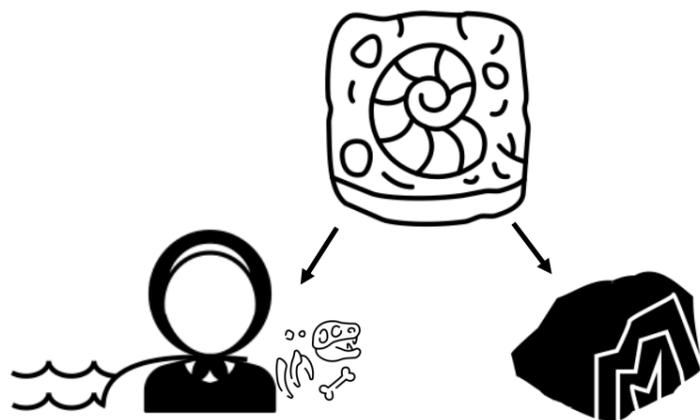
Metamorphic rocks are made from heat and pressure changing existing rock.

Igneous rocks are made from cooled lava or magma.

Chalk is soft and easily eroded (worn away). This makes it great for writing on blackboards.

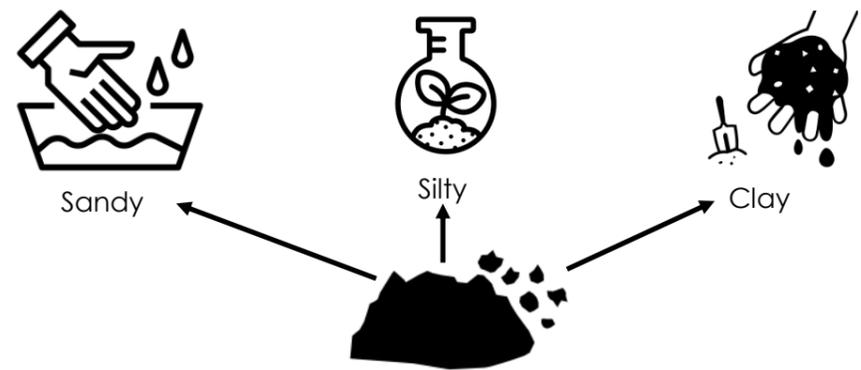
Granite is very hard and impermeable making it a good choice for kitchen surfaces.

Marble is easy to carve but not easily eroded meaning it is used for sculptures.



Fossils are the remains of once living things preserved in rock. They are only found in sedimentary rock.

Soil covers the Earth. It is made from dead plants and animals, air and rock. It keeps tree and plant roots anchored and is the basis of many food chains.



Sandy	Silty	Clay
<ul style="list-style-type: none"> <li>Large particles</li> <li>Low in nutrients</li> <li>Washed away easily</li> </ul>	<ul style="list-style-type: none"> <li>Medium size particles</li> <li>Good amount of nutrients</li> </ul>	<ul style="list-style-type: none"> <li>Very small particles</li> <li>Traps water</li> <li>Rich in nutrients</li> </ul>

Fossilisation is the process of becoming a fossil.

Mary Anning was a fossil hunter from Lyme Regis, Dorset. Known as the Jurassic Coast, she made two of her biggest discoveries here: Ichthyosaur 1811 and Plesiosaur 1823.