

# Rocks



## LKS2 Science: Rocks

### Scientific Concepts

<b>Properties</b>	A quality that something is known by e.g. characteristic.
<b>Classification</b>	Systematic arrangement in groups or category.
<b>Core Vocabulary</b>	
<b>Igneous rock</b>	Rock that has been formed from magma or lava. Examples include obsidian, granite and basalt.
<b>Sedimentary rock</b>	Rock that has been formed by layers of sediment being pressed down hard and sticking together. You can see the layers of sediment in the rock. Examples include limestone, sandstone and chalk.
<b>Metamorphic rock</b>	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure. Examples include marble, quartz and slate.
<b>Permeable</b>	Something that permits liquids to pass through it or soak into it.

### Images/diagrams

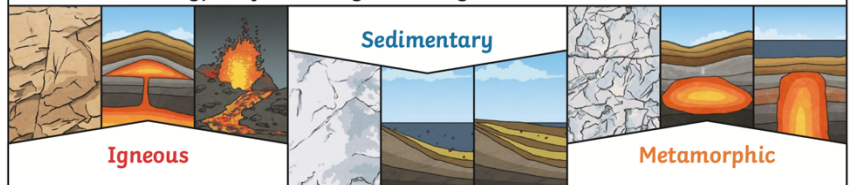
#### Types of rock

**Igneous rock** - When a volcano is about to erupt, magma comes to the surface. As it flows down the volcano and across the land, it cools and turns back into a solid. This forms rock.

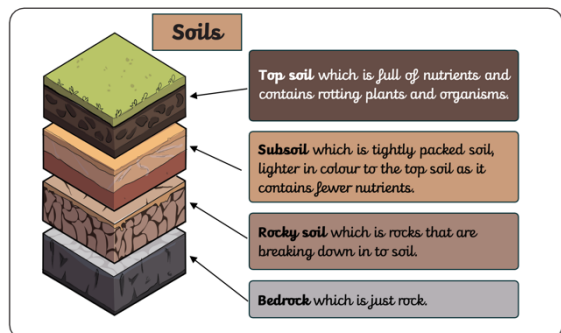
**Sedimentary rock** - When a river reaches the sea, pieces of broken rock settle at the bottom of the sea to form a layer of sediment. Over millions of years, more and more layers of sediment settle on top and squash it down until it turns into rock.

**Metamorphic rock** - Metamorphic rock is formed from other rocks that are changed because of heat or pressure.

There are three types of naturally occurring rock.



Natural Rocks			Human-Made Rocks
Igneous	Sedimentary	Metamorphic	
Obsidian	Chalk	Marble	Brick
Granite	Sandstone	Quartzite	Concrete
Basalt	Limestone	Slate	Coade Stone



Fossilisation					
An animal dies. It gets covered with <b>sediments</b> which eventually become rock.	More layers of rock cover it. Only hard parts of the creature remain, e.g. bones, shells and teeth.	Over thousands of years, <b>sediment</b> might enter the mould to make a <b>cast fossil</b> . Bones may change to mineral but will stay the same shape.	Changes in sea level take place over a long period.	As <b>erosion</b> and weathering take place, eventually the fossil becomes exposed.	

### Key Knowledge

1	Rocks are classified by the process in which they are formed. There are three types of naturally occurring rock: Igneous, Metamorphic and Sedimentary.
2	Some rocks are man-made such as brick or concrete.
3	Rocks come from inside the Earth and tell us about the Earth's interior and what the Earth was like in the past
4	Fossilisation occurs over thousands of years, after an animal dies and is covered with rock.
5	Soil is the uppermost layer of the Earth. It is a mixture of different things: minerals, air, water and organic matter.
6	Half of soil is air and water. In soil you can find sand, small stones, bits of leaves and roots. There are also millions of micro-organisms in the soil which help break down the matter and make the soil healthy and full of life