

Year 3 Science : Rocks

Key Vocabulary

Crust	the outer layer of the Earth.
Decay	to rot or decompose.
Erosion	When water, wind or ice wears away land.
Fossilisation	The process by which fossils are made.
Fossil	A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called fossilisation.
Geologist	a person who studies rocks
Igneous rock	rock formed from cooled magma.
Impermeable	Does not allow liquids to pass through it.
Lava	Molten rock that comes out of the ground is called lava
Magma	Molten rock that remains underground.
Mantle	the part of the Earth between the crust and the core

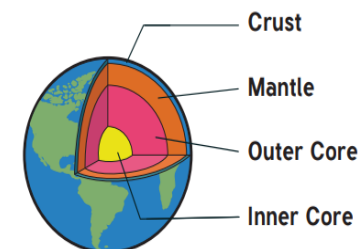
There are 3 different types of naturally occurring



Sedimentary	Metamorphic	Igneous
Rock that has been formed by layers of sediment being pressed down hard and together.	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.	Rock that has been formed from magma or lava.
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		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

Under our feet

Under our feet is a layer of rock. This layer of rock is under every town and city, under fields and forests and even under the sea!



Soil is the upper most layer of the earth. It is a mixture of different things;

- Minerals
- Air
- Water

Soil



Top soil - full of nutrients and contains rotting plants and organisms.

Subsoil - tightly packed soil, lighter in colour to the top soil as it contains fewer nutrients

Rocky soil - rocks that are breaking down into soil

Bedrock - just rock.

Key Vocabulary

Metamorphic Rock	Rock formed from changes of heat or
Mine	To dig into the Earth for rocks and minerals.
Microbe	A small living thing.
Permeable	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
Rock	Any naturally occurring solid mineral material.
Sediment	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
Sedimentary Rock	Rock formed by layers of sediment
Soil	Made up of pieces of rock, minerals, decaying plant material, microbes and water.

Fossilisation

An animal dies. It gets covered with sediments 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, sediment might enter the mould to make a cast fossil. Bones may change to mineral but will stay the same shape.



Changes in sea level take place over a long period.



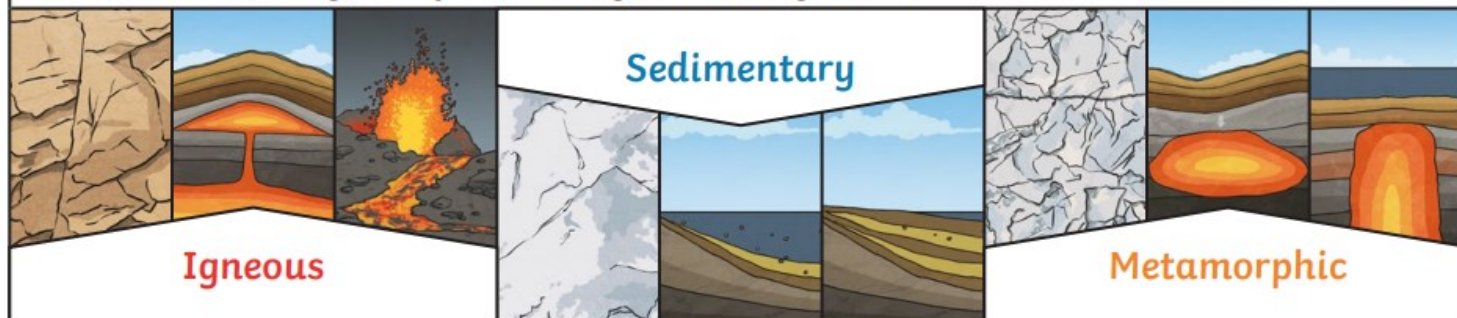
As erosion and weathering take place, eventually the fossil becomes exposed.



Year 3 Science : Rocks

Key Knowledge

There are three types of naturally occurring rock.

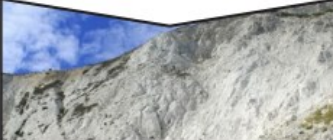
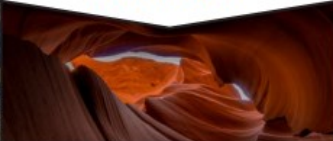


Key Vocabulary

Igneous	rock formed from cooled magma.
Metamorphic	Rock formed from changes of heat or
Sedimentary	Rock formed by layers of sediment

Key Vocabulary

Natural	Existing in or created by nature
Human-made	Created by human beings, not made

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