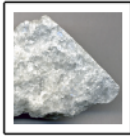


Rocks

If you dig down anywhere on Earth you will find rock. Rocks can be hard, soft, permeable or impermeable, depending on what type of rock it is. Slate, marble, chalk and granite are all different types of rock and all have different uses.



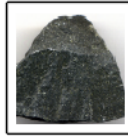
marble



granite



sandstone



basalt



slate



clay



chalk



pumice



limestone

Soils



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 in to soil.

Bedrock – just rock.

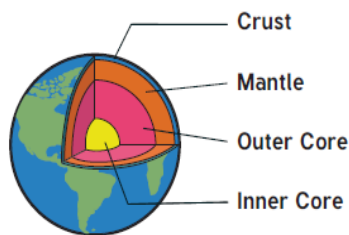
Fossils

A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called fossilisation.



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!



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.

Key Vocabulary

Crust – the outer layer of the Earth.

Decay – to rot or decompose.

Fossil – the preserved remains of a dead organism.

Geologist – a person who studies rocks.

Igneous Rock – rock formed from cooled magma.

Impermeable – doesn't allow liquid to pass through.

Inner core – the very centre of the Earth.

Mantle – the part of the Earth between the crust and the core.

Metamorphic rock – rock formed from changes of heat or pressure.

Microbe – a small living thing.

Mine – to dig into the Earth for rocks and minerals.

Permeable – allows liquid to pass through.

Rock – any naturally occurring solid mineral material.

Sedimentary rock – rock formed by layers of sediment

Soil – made up of pieces of rock, minerals, decaying plant material, microbes and water.

Mary Anning

Mary Anning was born on 21st May 1799.
She died on 9th March 1847.

Mary Anning is a significant individual because she was one of the first people to find fossils of prehistoric animals. She was a fossil hunter.



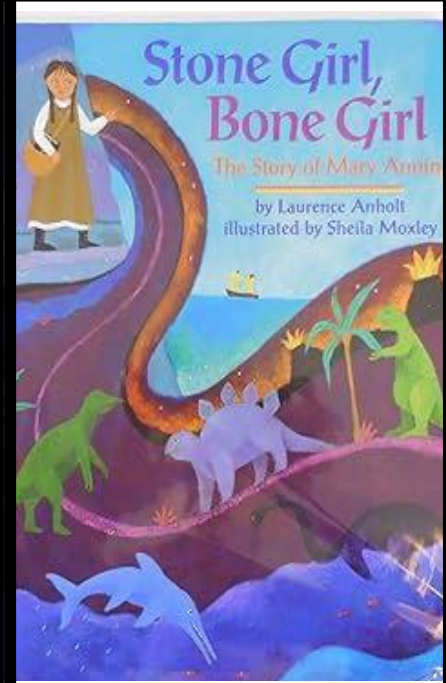
A fossil is a special rock that holds the remains of creatures that lived millions of years ago. They are formed over millions of years.

Mary lived in Lyme Regis by the sea. She would walk down by sea each day and pick up lots of fossils.

Mary found the first complete fossil of an Ichthyosaurus or 'fish lizard'.

She found lots of other huge fossils which were displayed in the Natural History Museum in London.

Mary is one of the most famous fossil hunters in the world.



Timeline

1799: Mary Anning is born.

1810-11: Discovery of the Ichthyosaur.

1847: Mary Anning dies.

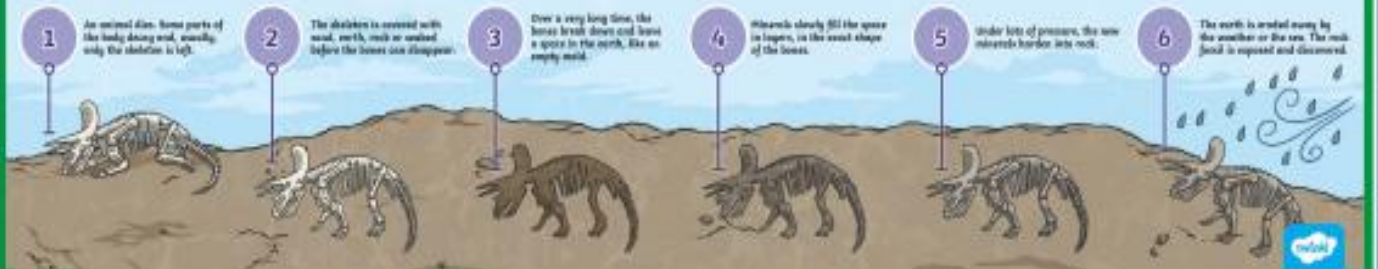
: You are born.

1810: Mary's father dies - he was influential in her life.

1837: Queen Victoria comes to the throne.

1926: David Attenborough is born.

How Are Mold and Cast Fossils Formed?



Permian Extinction

Dinosaur Extinction

Paleozoic Era

Mesozoic Era

Cenozoic Era

Triassic Period

Jurassic Period

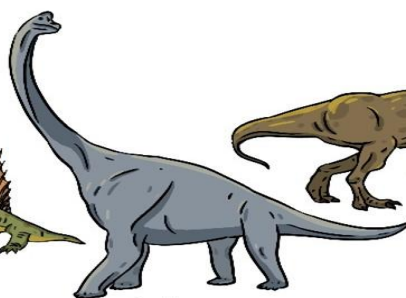
Cretaceous Period



Ammonite



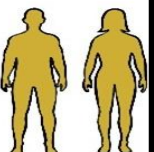
Dimetrodon



Brachiosaurus



Tyrannosaurus Rex



Human

251 Million Years Ago

200 Million Years Ago

146 Million Years Ago

65 Million Years Ago

Today