



Rocks and Soils

We will learn...

There are three types of rocks that are formed naturally.

Igneous: When molten magma cools, igneous rocks are formed. This either cools and forms rocks under the earth's surface, or flows out of erupting volcanoes as lava and may mix with other minerals.

Sedimentary: Sometimes, little pieces of rocks that have been weathered can be found at the bottom of lakes, seas and rivers. This is called sediment. Over millions of years, layers of this sediment builds up, forming sedimentary rocks.

Metamorphic: When some igneous and sedimentary rocks are heated and squeezed (pressured), they form metamorphic rocks.

Fossils are the remains of prehistoric life. They are usually formed when a living thing (plant or animal) dies and the body is covered up or buried by sediment over tens of thousands of years.

Soil is made from pieces of rock, minerals, decaying plants and water. When rock is broken down into small grains, soil is formed. There are layers of soil: above the soil is leaf litter and recently decaying plants. As the soil becomes deeper, the rock grains become larger until bedrock is reached.

Key vocabulary:

igneous	Rocks that are formed by volcanic action or intense heat.
metamorphic	Rocks that have had their original structure changed by pressure and heat.
sedimentary	Rocks that are formed by layers of little pieces of broken rock.
permeable	Water can pass through it.
porous	It has tiny holes in it.
sediment	Solid material that settles at the bottom of a liquid, especially earth and pieces of rock that have been carried along and then left somewhere by water, ice, or wind.
magma	Molten rock that is formed in very hot conditions inside earth.
decaying	Gradually being destroyed by a natural process.

Investigate:

- What are the properties of rocks?
- Make your own fossil- how are they made?
- What is in soil?



Inspirational Scientist

Holly Betts - Palaeobiologist

Holly studies fossils and uses them to tell us about our history.

Working scientifically

In this topic we develop the following practical skills:

- ✓ setting up simple practical enquiries, comparative and fair
- ✓ gathering, recording, classifying and presenting data in a variety of ways to help in answering questions