

How useful is the world around us?

SCIENCE



National Curriculum Links:

Rocks

Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.

Describe in simple terms how fossils are formed when things that have lived are trapped within rock. Recognise that soils are made from rocks and organic matter.

Essential Prior Learning:

Wood, metal, plastic, glass, brick, rick, paper and cardboard are all examples of materials.

Some materials occur naturally in the world; others need to be made.

There are observable differences between materials and they can be compared and grouped according to these.

Some materials can be changed by squashing, bending, twisting and stretching.

Progression in Skill:

Develop criteria to identify, group, sort and classify different kinds of rocks, taking into account similarities and differences in their appearance and simple physical properties.

Identify changes related to simple scientific ideas and processes.

Describe how fossils are formed when things that have lived are trapped within rocks.

Recognise that soils are made from rocks and organic matter.

Use secondary sources: books, photographs and videos.

Read and spell simple scientific vocabulary correctly.

Long-term Memory Knowledge:

There are different types of rock which are found in different places around the world.

Soil is a mixture of tiny particles of rock, dead plants and animals, air and water.

Different rocks and soils have a variety of properties which means they are suitable for different purposes.

Fossils were formed millions of years ago; most are formed when a plant or animal died in a watery environment and was buried in mud and silt.

Key Vocabulary

<b>erosion</b>	the process of being worn by wind, water, or other natural agents
<b>magma</b>	hot fluid or semi-fluid material <b>below</b> or within the earth's crust

<b>lava</b>	hot molten or semi-fluid rock that has <b>erupted from</b> a volcano
<b>fossil</b>	any preserved sign of past life more than 10000 years old
<b>sedimentary</b>	rocks formed from other rocks or once living organisms
<b>metamorphic</b>	rocks formed when they experience high heat or pressure
<b>igneous</b>	when hot, molten <b>rock</b> crystallizes and solidifies
<b>permeable</b>	allows liquids or gases to pass through
<b>impermeable</b>	doesn't allow liquids or gasses to pass through

Progression in Resources:

Hand lenses

Range of different types of rock and soil

Relevance

<b>Now</b>	Children know where fossils come from and why not everything that has lived becomes a fossil; they see rocks as something potentially useful.
<b>Future</b>	Children can select materials for a purpose, according to their properties.
<b>Aspiration</b>	Use natural materials for specific purpose, e.g. sculptor or stonemason. Develop a love for fossils and study as a palaeontologist.