

Topic Intent

Pupils will explore different kinds of rocks and soils, including those in the local environment. They will investigate the uses and properties of rocks and will use this knowledge to complete scientific investigations. Pupils will explore different soils and will identify similarities and differences between them.



Key Skills

- I can name different types of rock.
- I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- I can describe how fossils are formed.
- I can recognise that soils are made from rocks and organic matter.

Key Knowledge

<p>Layers of soil</p>	<p>The diagram shows a cross-section of the ground. At the top is a tree with roots extending into the soil. The soil is divided into layers: a thin top layer of humus, a thicker layer of top soil, a layer of sub soil, and a solid base of bed rock.</p>
<p>Fossils</p>	<p>What is a fossil? A fossil is the preserved remains or impressions of a living organism such as a plant, animal, or insect. Some fossils are very old. Studying fossils helps scientists to learn about the past history of life on Earth.</p> <p>Where are fossils found? Fossils are found all over the world. Most fossils are found in sedimentary rock such as shale, limestone, and sandstone.</p>
<p>Examples of rocks.</p>	<p>Granite, chalk, limestone, sandstone, basalt, marble, pumice and slate.</p>

Key Vocabulary

absorbent	A material that soaks up a liquid.
appearance	What something looks like.
boulder	A large, rounded rock.
characteristic	Something that makes a rock different from other rocks.
chalky soil	Soil that is light brown in colour, that water drains through quickly.
classify	To sort into groups dependent upon characteristics.
clay soil	Clay soil is usually sticky and has small particles. They contain very few air gaps and water does not drain through it easily.
erosion	When water wind wears away rocks and soils this is called erosion.
fossils	The bones or other remains of living things are sometimes preserved in rocks as fossils.
igneous rock	Igneous rocks form when hot liquid rock from deep in the earth cools and becomes solid.
man-made rocks	Rocks that are made by humans.
metamorphic rock	Metamorphic rocks are igneous or sedimentary rocks that have been changed by heat or compression.
microscope	Are used to magnify tiny objects.
natural rocks.	Rocks that occur naturally in the environment.
organic matter	Organic matter comes from plants and animals.
properties	A characteristic of a rock.
permeability	Water can go through permeable materials.
sedimentary rock	Sedimentary rock is formed when sediment collects at the bottom of a lake or sea.

For Further Information

<https://www.bbc.com/bitesize/articles/zsgkdmn>