



Linked learning theme: Super Scarborough

Autumn term, Year 3

Science – Rocks and soils

Prior Knowledge

In Y1 and 2 children learnt about properties of different materials. They also learnt about natural materials including rocks and fossils.

Core knowledge

- Different types of rocks are formed in different ways.
- Igneous rock has been formed from magma or lava.
- Sedimentary rock has been formed by layers being pressed down.
- Metamorphic rocks are formed from extreme heat or pressure.
- Rocks can be identified through their features and properties e.g. layers in sedimentary rock.
- There are human-made rocks such as brick and concrete.
- Fossils are formed when an animal dies and layers of sediment build up on top. Bones, shells and teeth can change into a cast fossil and be exposed by weathering and erosion.
- Soil is the uppermost layer of the Earth and is made of minerals from rocks, air, water and organic matter (plants and animals).

Key skills

- Ask relevant questions about rocks, their properties and how they were formed.
- To make comparisons between different rocks and group them based on their characteristics. Identify the type of rock based on this.
- Carefully observe the 3 different types of rock to create annotated diagrams.
- To analyse different types of soil and describe their similarities and differences. Investigate the permeability of the different types of soils by setting up a simple experiment. Make systematic observations and record findings using scientific language. Draw conclusions based on the results.
- Compare fossils to the animals they belong to.

Vocabulary

Igneous	Lava	Cast fossil	Impermeable
Sedimentary	Layers	Erosion	Fossilisation
Metamorphic	Pressure	Sediment	Palaeontology
Magma	Fossils	Permeable	

Learning outcomes

- I can compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- I can describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- I can ask relevant questions and use different types of scientific enquiries to answer them.

- I can gather, record, classify and present data in a variety of ways to help in answering questions.