## **Rocks and Fossils**

# Overview of unit / topic

In this unit we will be digging deep and unearthing the fascinating world below ground. We will find out about different types of rocks and what they can be used for, explore a variety of soils and find out how they are formed and discover the fascinating world of fossils.

# **Key Questions**

What is a rock?
Where do rocks come from?
How are rocks formed?

What is soil?

How is soil formed?

What is a fossil and how are they formed?

# **Key Vocabulary**

Rock, soil, various rock type names, sedimentary, igneous, metamorphic, permeable, non-permeable, absorbent, volcano,

rock – a solid material that makes up the surface of the Earth
 soil – a black or dark brown material on the upper layer of the Earth where plants grow
 fossil – the remains of a prehistoric animal embedded in rock
 appearance – what something looks like
 physical properties – a characteristic of an object

# Key Knowledge and Understanding: What will we be learning about in this unit / topic?

- To identify naturally occurring rocks and explore their uses.
- To be able to groups rocks according to their characteristics.
- To know how rocks are formed.
- To identify different types of rock.
- To explore soils and how it is formed.
- To know that the earth is made up of different layers of rocks and soil.
- To describe how fossils are formed.

## Types of Rock - There are three main types of rocks

#### **IGNEOUS**

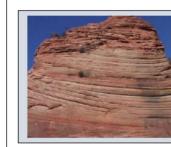
#### **METAMORPHIC**

#### SEDIMENTARY

Far underground the temperature is so hot, rock melts into a liquid (molten rock). When the liquid is underground it is called magma and it can cool to form igneous rock.

Metamorphic rocks are formed under the surface of the earth from the change (metamorphosis) that occurs under the intense heat and pressure (squeezing).

These rocks form under the sea. Rocks are broken into small pieces by wind and water (erosion). They settle as mud, sand, minerals and even remains of living things. Over time layers build up and the pressure turns this sediment into rock.









### What is soil made from?



AIR - Oxygen, carbon dioxide, nitrogen etc.



ORGANIC MATTER -Living and dead plants and animals.



WATER - Air and water fill the gaps between particles of soil.



MINERALS - From broken down rock.

## Fossils

This is the remains or the impression left by a prehistoric plant or animal embedded in rock.



