



Knowledge I already have

In Year 1:

- I distinguished between an object and the material from which it is made.
- I identified and named a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- I described the simple physical properties of a variety of everyday materials.
- I compared and grouped together a variety of everyday materials on the basis of their simple physical properties.

In Year 2:

- I identified and compared the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.

New Knowledge

By the end of this unit:

- I will compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- I will describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- I will recognise that soils are made from rocks and organic matter.



Future Knowledge

In Year 6, I will:

- recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

In KS3, I will learn about:

- the composition of the Earth.
- the structure of the Earth.
- the rock cycle and the formation of igneous, sedimentary and metamorphic rocks.

Scientific Enquiry

Comparative and fair tests:

- Devise comparative tests to investigate different properties of rocks e.g. hardness and permeability.
- Devise a fair test to investigate the water retention of different soils.

Identifying and classifying:

- Observing rocks closely and classifying them in different ways using correct vocabulary.
- Observing soils closely and classifying them in different ways using correct vocabulary.

Researching using secondary sources:

- Research and present how fossils are formed.
- Research and present the work of Mary Anning.

Rock is a naturally occurring material. There are different types of rock e.g. sandstone, limestone, slate which have different properties. Rocks can be hard or soft. They have different sizes of grain or crystal. They may absorb water. Rocks can be different shapes and sizes (stones, pebbles, boulders). Soils are made up of pieces of ground down rock which may be mixed with plant and animal material (organic matter). The type of rock, size of rock pieces and the amount of organic matter affect the property of the soil. Some rocks contain fossils. Fossils were formed millions of years ago. When plants and animals died, they fell to the seabed. They became covered and squashed by other material. Over time the dissolving animal and plant matter is replaced by minerals from the water.

fossil



The remains or traces of plants and animals that lived long ago. Fossils give scientists clues about the past.

hardness



The extent to which a material can be scratched or dented.

permeable



Allowing water or other liquids to soak into or flow through.

rock



A hard material made up of one or more minerals. Rock makes up the outer layer of Earth, called the crust.

soil



Soil is a mixture of minerals and organic material that covers much of the Earth's surface.

sandstone



marble



granite



chalk



slate



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