



Year 3



Rocks

Statutory Requirements:

- 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

Working Scientifically:

- Asking relevant questions and using different types of scientific enquiries to answer them
- Setting up simple practical enquiries, comparative and fair tests
- Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables

Key Knowledge:

Mineral – naturally occurring chemical with the same properties all the way through.

Rock - made of minerals, fragments of older rocks, or fossils.

Fossil – preserved signs of past life more than 10,000 years old.

Rock formations

Igneous: Formed when molten rock has cooled - contains crystals.

Sedimentary: Formed when igneous rocks are worn down and layers of resulting sediment build up and are compressed.

Metamorphic: Formed when the structure of a rock has been changed due to intense pressure and heat.

Key Vocabulary:

- Names of rocks – chalk, limestone, granite, basalt, sandstone, flint, slate, shale, marble
- Types of rock – sedimentary, metamorphic, igneous
- Types of minerals – calcite, feldspar, topaz, diamond, talc, corundum
- Properties of rocks – hard/soft, permeable/impermeable
- Processes – heat, pressure, erosion, transportation, deposition, melt, solidify
- Size of rocks – grain, pebbles
- Rock describing words – crystals, layers
- Early areas of land – Gondwana, Pangea
- Land formations – plates, volcanoes, mountains, valleys

Key Scientists:



**Mary Anning
(1799 – 1847)**

English fossil collector and palaeontologist.



**James Hutton
(1726 – 1797)**

Scottish chemist – known as the father of modern geology.