

# Catton Grove Primary School - Science

Year 3

Topic: Rocks, Soils and Fossils

Strand: Biology

## What should I already know?

- how to identify everyday materials including rock
- how to identify and compare everyday materials including rock

## Misconceptions:

- that all rocks are large, heavy and jagged.
- that rocks are made of one substance: in fact, some rocks contain crystals and are made of more than one mineral.
- that concrete is a rock.
- that fossils are actual animals and plants.
- that only bones can be fossils.
- that humans can make rocks: in fact, rocks are naturally occurring.
- that rocks form when pebbles stick together: in fact, pebbles are fragments of rock.
- that all sedimentary rocks form under water: in fact, they can be formed on land, e.g. desert sandstone.

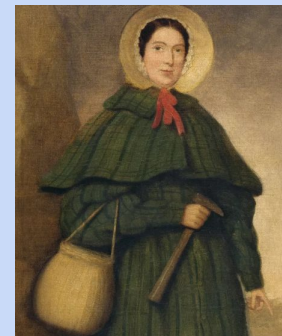
## Our Learning Objectives:

- 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.

## Spotlight on a Scientist:

**Mary Anning** was an English palaeontologist and fossil collector. Her findings gave her the title 'the greatest fossilist the world ever knew'.

She was born on May 21, 1799, in Lyme Regis where the cliffs are rich in spectacular fossils from the seas of the Jurassic Period



## Scientific Skills:

- Ask relevant questions
- Use fair tests
- Make careful observations and use measurements with different equipment.
- Present findings in a way which helps children answer questions
- Draw conclusions from investigations and tests.

## Scientific Enquiry

How are rocks the same and different?

What are the different types of rocks?

Where does soil come from?

How are fossils formed?

What conclusions can I make about rocks, soils and fossils?

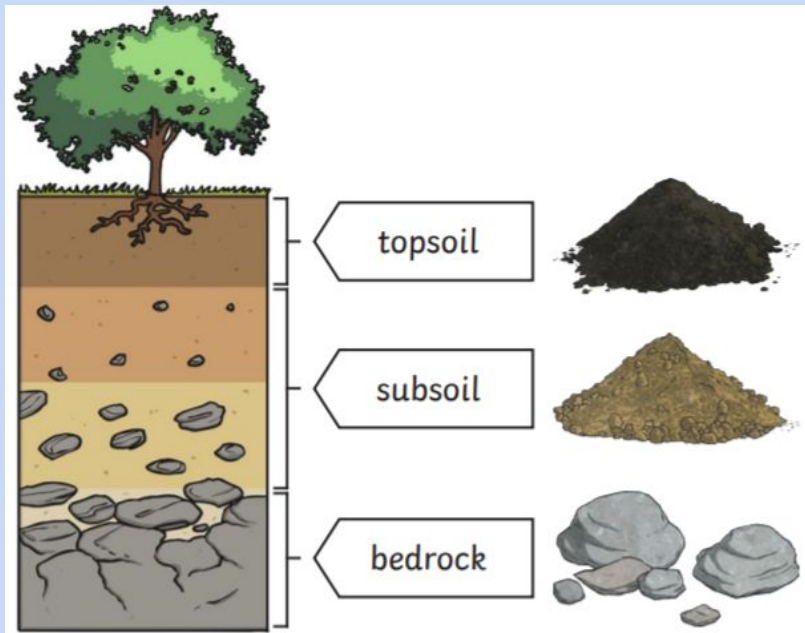
## Scientific Vocabulary:

mineral: a natural substance that makes up rock rock: made from one or more minerals permeable: allows water to pass through	metamorphic: rock that has been changed by heat or pressure
extinct: when there are no more of a particular animal or plant species alive anywhere in the world – they have died out	mineral: a natural substance that makes up rock
fossil: the prehistoric remains of a plant or animal	palaeontologists: scientists who study the remains of plants and animals that lived millions of years ago
granite: a kind of igneous rock which is very hard and light-coloured	palaeontology: the study of plants and animals that lived millions of years ago
igneous: rock formed from magma	rock: made from one or more minerals
humus: part of soil made from dead plants and animals – gives soil a dark colour	sediment: small bits of rock
igneous: rock formed from magma	sedimentary: rock made from sediment
impermeable: does not allow water to pass through	soil: small particles of rock mixed with decayed plant and animal material
magma: hot liquid rock	Key words: names of some rocks: granite / marble / sand / clay / limestone

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## Soil:



## Fossils:



## Rocks

