



Rocks

Objectives

The rock cycle and how rocks are formed.

Compare and group different rocks.

Working scientifically. Investigate permeability and durability.

Understand how fossils are formed.



Recognise that soils are made from rocks and organic matter.

Scientist: Mary Anning (1799-1847)

Mary Anning was born in the seaside town of Lyme Regis, Dorset, UK. Young Mary developed a deep love of fossil hunting. When she was 12, she uncovered a strange 5.2-metre long skeleton! It was an ancient species named Ichthyosaurus (fish lizard). In 1823, she made another important discovery – the first ever **Plesiosaur skeleton**! Today, Mary is recognised as a **pioneer** in the field of **palaeontology** (the study of fossils) and is celebrated as the greatest fossil hunter of all time!



Scientific Terminology

durability - the quality of something that can last for a long time without becoming damaged or deteriorating in quality.

fossil - the preserved remains of a dead organism.

geologist - a person who studies rocks.

impermeable – does not allow liquid to pass through.

mineral - substances that are formed naturally in the Earth and are usually solid, inorganic, have a crystal structure.

organic matter- living and dead animals or plants.

organism- an individual animal, plant, or single-celled life form. *The soil is full of organisms, such as earthworms, bacteria, and fungi.*

permeable - allows liquid to pass through.

sediments- solid material that settles at the bottom of a liquid or on the Earth's surface. It can be made up of grains of sand, mud, pebbles, minerals, fossils, and plants.

Questions

- 1) Define permeable and impermeable.
- 2) What are rocks used for?
- 3) Name different types of rocks.
- 4) Fossils are predominantly found within _____ rocks.
- 5) How are fossils formed?
- 6) Rocks can be formed in three different ways. Name these three types of rock.
- 7) Which of the following is NOT a type of rock? Limestone, concrete, granite or slate
- 8) Soil is a mixture of tiny particles of r____, h____, a____ and w____.
- 9) What is organic matter?



LIMESTONE



SLATE



MARBLE



BASALT



GRANITE



SANDSTONE