

What should I already know?

Identify and name a variety of everyday materials including, including wood, metal, plastic, glass water and rock—Y1

Compare and group together a variety of everyday materials on the basis of their simple properties—Y1

Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses—Y2

What will I know by the end of the unit?

What are the different types of rocks?

There are 3 types of naturally formed **rocks**

1) **Igneous**: strong, hard and non-porous
When **molten magma** cools, **igneous rocks** are formed. This either cools and forms **rocks** under the earth's **surface**, or flows out of erupting **volcanoes** as lava

Examples: granite and basalt.

2) **Sedimentary**: porous and easily worn
Sometimes, little pieces of rocks that have been weathered can be found at the bottom of lakes, seas and rivers This is called **sediment**. Over millions of years, layers of this **sediment** builds up forming sedimentary rocks.

Examples: limestone and chalk.

3) **Metamorphic**: strong
When some **igneous** and **sedimentary** rocks are heated and squeezed (pressured), they form **metamorphic rocks**.

Examples include slate and marble.

Bricks and concrete are not **rocks** because they are man-made.

What is a fossil?

Fossils are usually formed when a living thing (plant or animal) dies and the body is covered up or buried by **sediment** over tens of thousands of years.

Some **fossils** are formed when the tough bones and teeth in animals, and the woody part of plants are **preserved**.

Other **fossils** are made from imprints in surrounding **sedimentary rock** (footprints shells)

Fossils tell us about the Earth and about life that existed hundreds of thousands and millions of years ago.

What is soil?

Soil is made from pieces of rock, **minerals**, **organic matter** and water. When **rock** is broken down into small **grains**, **soil** is formed. Above the soil is **leaf litter** and **decaying** plants (organic matter). As the **soil** becomes deeper, the **rock grains** are larger until **bedrock** is reached.

Vocabulary

| | |
|---------------|--|
| absorb | soak up or take in |
| decay | gradually being destroyed by a natural process |
| grain | a tiny hard piece of something such as sand or salt |
| igneous | rocks that are formed by volcanic action or intense heat and then cooled |
| magma | molten rock that is formed in very hot conditions inside the earth |
| metamorphic | rocks that have had their original structure changed by pressure and heat |
| molten | molten rock, metal, or glass has been heated to a very high temperature and has become a hot, thick liquid |
| palaeontology | the study of fossils as a guide to the history of life on Earth |
| porous | has many small holes in it, which water and air can pass through |
| preserve | to protect from decay |
| rock | a solid mass made up of minerals . Rock forms much of the earth's outer layer, including cliffs and mountains |
| sediment | solid material that settles at the bottom of a water (sea/river). |
| soil | the substance on the surface of the earth in which plants grow |
| volcano | a mountain from which hot melted rock, gas , steam, and ash from inside the Earth sometimes burst. |