Knowledge Organiser Year 3 - Autumn 2 2023

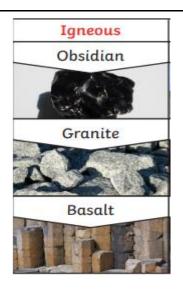


Science - Rocks and Fossils



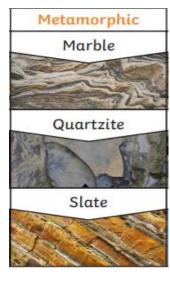
Types of Rocks

IGNEOUS ROCKS - are very hard, dark and heavy. They are formed when molten magma from a volcano cools down. They tend to have interlocking grains giving the rock a crystalline appearance. EXAMPLES: granite, basalt, obsidian.



METAMORPHIC ROCKS - are

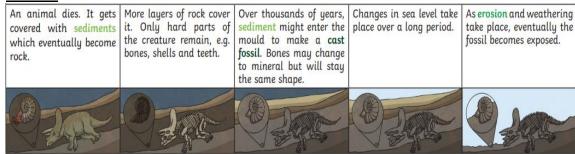
rocks which have been changed over time by pressure or heat. Fossils can be found in metamorphic rocks if plants and animals have been trapped in the rocks. They are hard but can be damaged by acids. EXAMPLES: slate, marble, quartzite



Soil is the uppermost layer of the Earth. It is a mixture of different things: Minerals (the minerals in soil come from finely broken-down rock); <u>air</u>, <u>water</u> and <u>organic matter</u> (including living and dead plants and animals).



FOSSILS



When an animal or plant dies, it usually decays quickly or can be eaten. However, sometimes an animal's body sinks into thick mud where there is oxygen so the remains don't decay. The remains rest here for thousands/millions of years with more mud and pressure on them. Minerals in the mud turn the remains to stone.

formed by <u>sediment</u> (which includes minerals, small pieces of plants and other organic matter) that is deposited over time. The sediment is <u>compressed</u> over a long period of time before it become solid layers of rock.

EXAMPLES: sandstone, limestone, flint, chalk.



Human-Made
Rocks

Brick

Concrete

Coade Stone

Sometimes, rocks can be manipulated and reshaped. We say these rocks are human made.

KEY VOCABULARY

Rock – made up of grains that are packed together

Fossil – the remains or impressions of a prehistoric plant or animal embedded in rock

Sediment – dead animals, plants or pieces of rock that settles to the bottom of a liquid.

Magma – liquid rock inside a volcano

Lava – liquid rock which flows out of a volcano

Permeable - Allows liquids to pass through it.

Impermeable - Does not allow liquids to pass through it.

YOUR HOME LEARNING PROJECT

In order to prepare for this exciting unit of learning, your task is to design a project about **rocks**. To construct your project, you can use recyclable materials. It can be a poster, booklet, model or anything else you can think of!

Be as creative as you like. Below are some ideas:





