

Topic:

Rocks and Fossils

Year:

3

Term:

Autumn 1

Key Knowledge

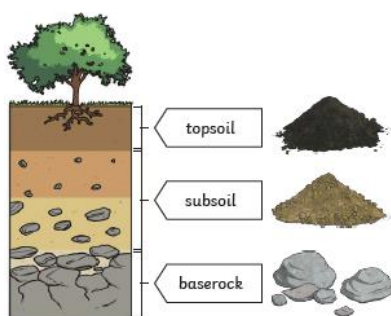
- There are three types of naturally occurring rock.



- There are Natural rocks and Human-Made rocks.

Natural Rocks			Human-Made Rocks
Igneous	Sedimentary	Metamorphic	
Obsidian	Chalk	Marble	Brick
Granite	Sandstone	Quartzite	Concrete
Basalt	Limestone	Slate	Cobble Stone

- Soil is the uppermost layer of the Earth. It is a mixture of different things: **minerals** (these come from finely broken down rock), **air**, **water** and **organic matter** (including living and dead plants and animals).



- Caves are formed when water **permeates** through the base rock and **erodes** some of the rock away. Over thousands of years these caves can become very large.

Key Vocabulary

Igneous rock – Rock that has been formed from magma or lava.

Sedimentary rock – Rock that has been formed by layers of sediment being pressed down hard and sticking together. You can see the layers of sediment in the rock.

Metamorphic rock – Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.

Magma – Molten rock that remains underground.

Lava – Molten rock that comes out of the ground is called lava.

Sediment – Natural solid material that is moved and dropped off in a new place by water or wind e.g. sand.

Permeable – Allows liquid to pass through it.

Impermeable – Does not allow liquids to pass through it.

Fossilisation – The process by which fossils are made.

Palaeontology – The study of fossils.

Erosion – When water, wind or ice wears away the land.

Bedrock – The solid rock underneath soil or loose rocks; the lowest of three main layers of soil.

Subsoil – The middle layer of soil, which contains more rocks than topsoil.

Topsoil – The top layer of soil, in which most plants have their roots.

Useful Websites

<https://www.stem.org.uk/resources/elibrary/resource/26719/rocks-rocks-and-fossils>

<https://www.bbc.co.uk/bitesize/topics/z9bbkqt>

Fossilisation

An animal dies. It gets covered with sediments which eventually become rock.	More layers of rock cover it. Only hard parts of the creature remain, e.g. bones, shells and teeth.	Over thousands of years, sediment might enter the mould to make a cast fossil. Bones may change to mineral but will stay the same shape.	Changes in sea level take place over a long period.	As erosion and weathering take place, eventually the fossil becomes exposed.