

Year 3 Science – Rocks and their Properties, Fossils

Scientific knowledge:

Children will explore different types of rocks, compare and group rocks, recognise that soils are made from rocks and learn how fossils are made.

Working scientifically:

Children will:

- identify differences, similarities or changes related to simple scientific ideas and processes;
- report on findings from enquiries, including oral explanations.

Key questions:

Can children group rocks based on properties?

Can children talk about / draw a diagram / write about their findings?

Can children draw conclusions about the least / most wearing rock?

Can children describe how fossils are formed?

Key vocabulary

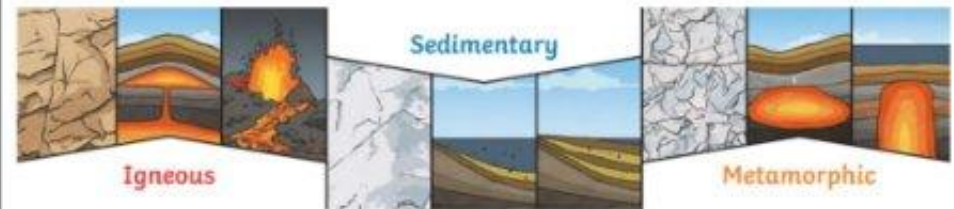
soil	The uppermost layer of the earth.
magma	Molten rock that remains underground.
lava	Molten rock that comes out of the ground.
sediment	Natural solid material that is moved and dropped off in a new place by water or wind, for example sand.
permeable	Allows liquids to pass through it.
impermeable	Does 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 land.

There are three types of rock:

Igneous: Rock that has been formed from magma or lava.

Sedimentary: 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.

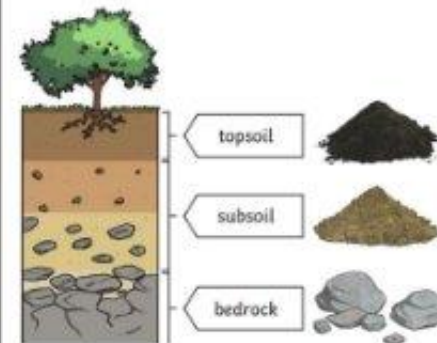
Metamorphic: Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.



Fossils: Fossils tell us about creatures that lived millions of years ago. When a creature dies, sediment covers it and eventually becomes rock. Over time more layers form over the top until only the hard parts remain and turn to rock.



Soil is the topmost layer of the earth. It is formed of minerals, water, air and organic matter (plants and animals).



Layers of the Earth:

The Earth is formed of four main layers. The crust, mantle, outer core and inner core.

