



Year 3- Term 1: Science – Rocks and soils

Curriculum Key Question: Where are we going?

Topic: How do we know dinosaurs existed?

To compare rocks and know the difference between human-made and natural rocks

To know different types of rock.

To group rocks based on their properties and uses

To explain how soil is formed and layered

To test soils for different features

To know how fossils are made and different types of fossil.

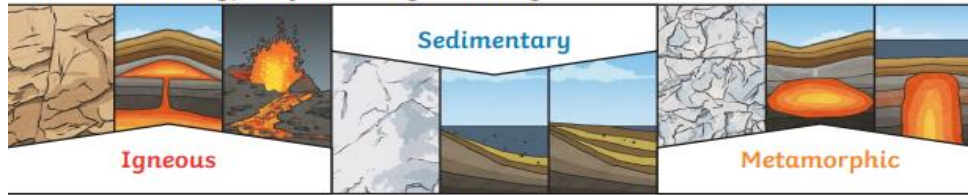
What should I already know?

- the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses
- how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Scientific Skills I will develop:

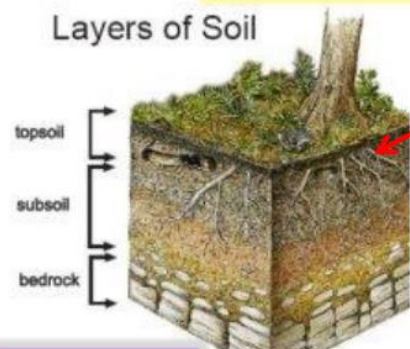
- asking relevant questions
- setting up simple practical enquiries, comparative and fair tests
- making systematic and careful observations, taking accurate measurements
- gathering, recording, classifying and presenting data in a variety of ways
- recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- reporting on findings from enquiries
- using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- identifying differences and similarities
- using straightforward scientific evidence to answer questions or to support their findings.

There are three types of naturally occurring rock.



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

Layers of Soil



Fossilisation

1. An animal dies.
2. The soft parts break down (decompose) leaving the hard parts behind.
3. The hard parts are buried by small bits of rock called sediment.
4. As layers build up, the sediment becomes rock.
5. The bones dissolve, minerals replace the bone, leaving a rock replica of the original bone called a fossil.

Key Vocabulary (including definition)

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 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.