





St Luke's Knowledge Organiser



Year 3 – Rocks, fossils and soils.

What I should already know

- Sticky knowledge from prior materials units.
- Properties of materials
- Plants

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

Working Scientifically

- To identify naturally occurring rocks and explore their uses.
- To group rocks according to their characteristics using Venn and Carroll diagrams.
- To plan, carry out and evaluate experiments to compare rocks.
- To identify rocks that are used for particular purposes.
- To explore soil and how it is formed.

Sticky Knowledge

- ♦ There are three types of naturally occurring rock; igneous, sedimentary and metamorphic.
- ♦ Most of our planet is made of rock. Rock is made up of a mixture of minerals that are pressed tightly together.
- ♦ Erosion is the process when something is worn away by water, wind or other natural materials over time.
- ♦ The word permeable refers to how much liquid a material will let pass through it.
- ♦ There are more micro-organisms (tiny living things) in a handful of soil than there are people on Earth.
- ♦ Soil contains lots of nutrients that help plants grow.
- ♦ As well as rock, soil is made from decaying organic matter such as dead plants or animals.

Vocabulary

fossil	A fossil is the preserved remains or traces of a dead organism.
sedimentary	Rocks are made when sand, mud and pebbles get laid down in layers. Over time, these layers are squashed under more and more layers.
metamorphic	When a rock experiences heat and pressure, it becomes a metamorphic rock. All metamorphic rocks start as another type of rock.
igneous	Rock that has been formed from magma or lava.
organic matter	Organic matter is matter that has come from a recently living organism. It is capable of decaying.
permeable	How much liquid a material will let pass through it.
impermeable	Does not allow liquid to pass through.
fossilisation	The process by which fossils are made.