

## Science Year 3 Rocks, Soils and fossils

### Key Learning Points:

1. Explore the formation and properties of igneous rocks
2. Explore the formation and properties of sedimentary and metamorphic rocks
3. Weathering and the suitability of rocks for different purposes
4. Explore how water contributes to the weathering of rocks
5. Understand how fossils are formed
6. Explore the different types of soil

### Key Facts

Fossils are formed when an animal dies and is covered with sediments which eventually become rock. More layers of rock cover the sediment and only the hard parts of the creature remain, e.g. bones, shells and teeth. Over thousands of years, sediment can enter the mould to make a cast fossil. Bones can change to mineral but will stay the same shape. When the sea begins to recede, erosion and weathering take place, eventually exposing the fossil.

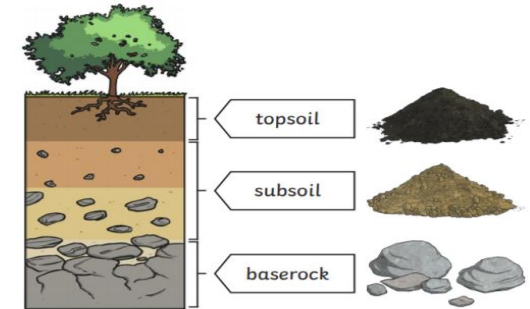
Soil is the uppermost layer of the Earth. It is a mixture of different things: Minerals (the minerals in soil come from finely broken-down rock); air; water; organic matter (including living and dead plants and animals)



**St Leonard's CE Primary Academy**

Living and Learning Together with God's Help

This topic will link to our resilience driver as we learn about the properties of rocks and soils and what they are able to withstand.



### 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 changes 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 liquid 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.
durability	The ability to withstand wear, pressure or damage
density	Measures how 'bulky' something is (how tightly packed the molecules are)

### Natural Rocks

### Human-Made Rocks

#### Igneous

#### Sedimentary

#### Metamorphic



Obsidian



Granite



Basalt



Chalk



Sandstone



Limestone



Marble



Quartzite



Slate



Brick



Concrete



Coade Stone