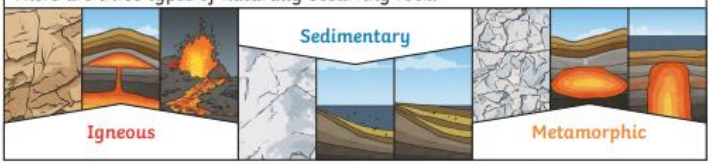
Year 3 Science Knowledge Organiser Spring Term 2025

This term, in Science, we will learn about the different types of rocks and how they are formed. We will learn how fossils are formed and learn about the contribution of Mary Anning to the field of palaeontology. We will learn how soil is formed and investigate the permeability of different types of soil.

Key Knowledge

There are three types of naturally occurring rock.



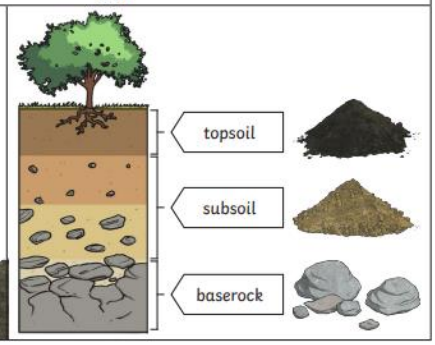
Natural Rocks			Human-Made Rocks
Igneous	Sedimentary	Metamorphic	
Obsidian	Chalk	Marble	Brick
Granite	Sandstone	Quartzite	Concrete
Basalt	Limestone	Slate	Coade Stone

Key Knowledge

Soil

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).



Key Vocabulary

igneous *sedimentary*

metamorphic *magma*

lava *sediment*

permeable *impermeable*

fossilisation *palaeontology*

erosion

Mary Anning 1799 – 1847

Mary Anning is significant because she found the first fossils of prehistoric animals. She found fossils in the Jurassic marine fossil beds on the English Channel at Lyme Regis. Her work influenced the way of scientific thinking about the history of the Earth and prehistoric life.

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.