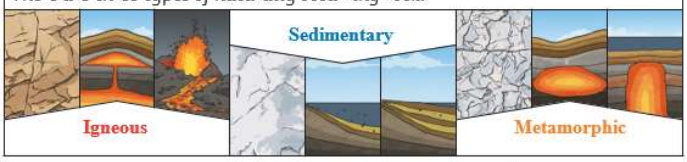
Rocks, Fossils and Soils

Unit Vocabulary – Join them up with the correct definition once you have learned it,

Igneous rock	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
Sedimentary rock	When water, wind or ice wears away land.
Metamorphic rock	Molten rock that remains underground.
Man-Made	Does not allow liquids to pass through it.
Permeable	Rock that has been formed by layers of sediment being pressed down hard and sticking together.
Impermeable	The study of fossils.
Sediment	Rock that has been formed from magma or lava.
Magma	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.
Lava	Rocks made by humans.
Soil	The uppermost layer of the earth's crust.
Erosion	The process by which fossils are made.
Fossilisation	Molten rock that comes out of the ground.
Palaeontology	Allows liquids to pass through it.

Key Knowledge

There are three types of naturally occurring rock.



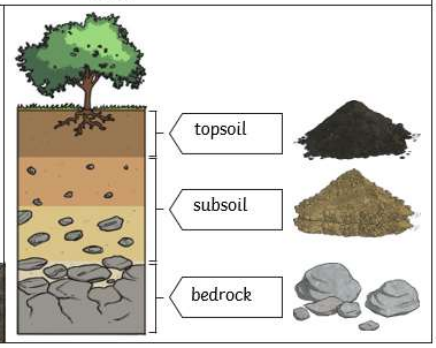
Natural Rocks			Human-Made Rocks
Igneous	Sedimentary	Metamorphic	
Obsidian	Chalk	Marble	Brick
Granite	Sandstone	Quartzite	Concrete
Basalt	Limestone	Slate	Coade Stone

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).



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.

Scientific Enquiries

1. What are the properties of three types of naturally occurring rock?
2. How are the three types of naturally occurring rock formed?
3. How are fossils formed?
4. What are the contents of soils and how is soil formed?