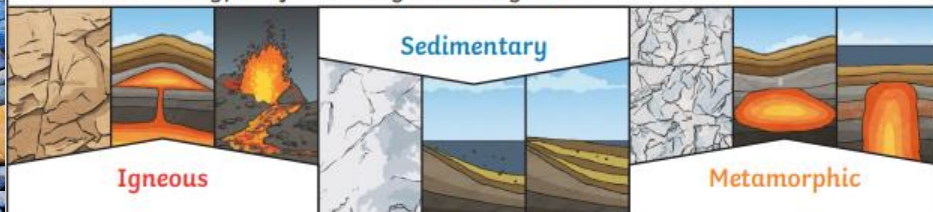


Rock Detectives

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

Fossilisation

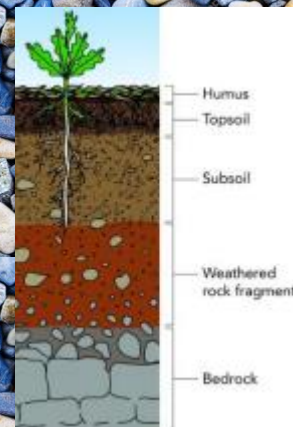
1. An animal dies. It gets covered with sediments which eventually become rock.
2. More layers of rock cover it. Only hard parts of the creature remain, e.g. bones, shells and teeth.
3. Over thousands of years, sediment might enter the mould to make a cast fossil.
4. Bones may change to mineral but will stay the same shape.
5. As erosion and weathering take place, eventually the fossil becomes exposed.

Soil

Half of soil is air and water. In soil you can find sand, small stones, bits of leaves and roots. There are also millions of micro-organisms in the soil which help break down the matter and make the soil healthy and full of life.

Key Vocabulary

Rock, Mineral, Fossil, Igneous, Metamorphic, Sedimentary, Sediment, Magma, Lava, weathered, hard, soft, permeable, impermeable, durable (meaning resistant to weathering).



Glossary

Rock – made up of grains that are packed together.

Mineral – solid chemical substances that occur naturally.

Fossil – the remains or impressions of a prehistoric plant or animal embedded in rock.

Igneous – lava or magma that has turned from liquid to solid (forming a rock).

Metamorphic – an igneous or sedimentary rock that has been changed by extreme heat or pressure.

Sedimentary – a rock formed from the build-up of sediment at the bottom of rivers or oceans.

Sediment – dead animals, plants or pieces of rock that settles to the bottom of a liquid.

Magma – liquid rock inside a volcano.

Lava – liquid rock which flows out of a volcano (ranges from 700 to 1200 degrees).