

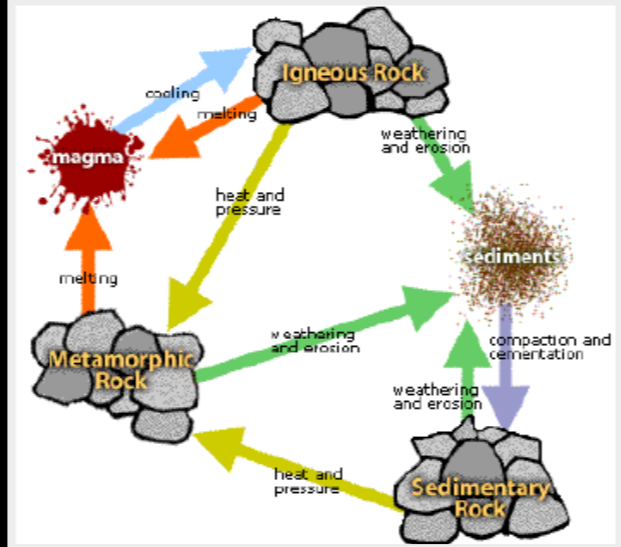
Cunningham Hill Junior School - Science Knowledge Organiser - Rocks and Fossils - Year 3

Different Ways that Rocks are Made:

Igneous	Sedimentary	Metamorphic
Igneous Rock	Sedimentary Rock	Metamorphic Rock
Igneous rocks like granite are very hard, dark and heavy.	Limestone is a good example of a sedimentary rock.	Slate is a good example of a metamorphic rock.
They are formed when molten magma from a volcano cools down.	These are formed when small pieces of bones or shells of animals are pressed into layers of rock over many years	These are formed when sedimentary rocks are changed by heat or pressure.
They do not contain fossils.	They often contain fossils	When this happens any fossils are destroyed
There are lots of granite rocks in Scotland and some parts of England too!	Many of these rocks are light in weight and colour.	

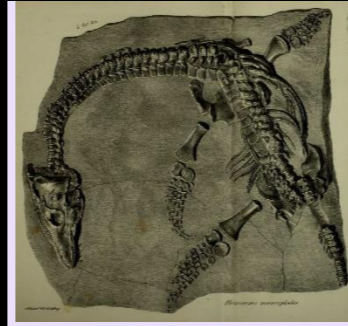
The Rock Cycle:

This diagram shows how different rocks can change form.



Key Vocabulary:

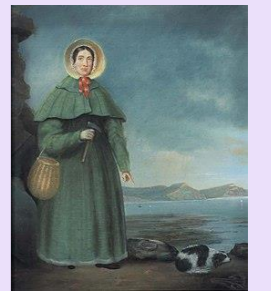
rock	A naturally occurring solid mass made of minerals.
magma	Molten rock that remains underground.
lava	Molten rock that comes out of the ground is called lava.
sediment	Natural solid material that is moved and dropped off in a new place by water or wind.
permeable	Allows liquids to pass through it.
impermeable	Does not allow liquids 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.



Scientist Study:

Mary Anning - Born: 1799 Died: 1847 Lived in Lyme Regis, England.

Mary Anning was an English fossil collector. She discovered several dinosaur specimens that were important in the early development of palaeontology (which is the study of ancient life).



Types of Rocks:

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

Fossilisation:

An animal dies. It gets covered with sediments which eventually become rock.

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.

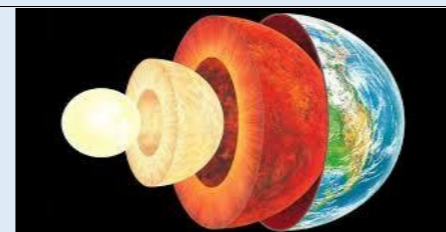
Changes in sea level take place over a long period.

As erosion and weathering take place, eventually the fossil becomes exposed.



Layers of the Earth:

Inner Core, Outer Core, Mantle and Crust



Contents of Soil:

Minerals (finely broken down rock).

Air

Water

Organic matter (living and dead plants and animals).

