

SCIENCE KNOWLEDGE ORGANISER




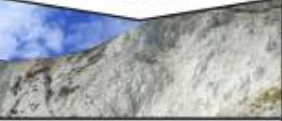




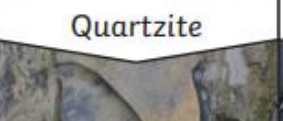




Rocks

Key Questions

- How are fossils formed?
- How and why do rocks change over time?
- Are all rocks the same?
- How are different soils formed?

ESSENTIAL VOCABULARY

Igneous rock	Rock that has been formed from magma or lava.
Sedimentary rock	Formed by layers of sediment being pressed down hard and sticking together.
Metamorphic rock	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure.
Magma	Molten rock that remains underground.
Lava	Molten rock that comes out of the ground.
Sediment	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
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.

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

The Fossilisation Process

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.
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Outcomes

- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- Recognise that soils are made from rocks and organic matter.

Soil

