

How do rocks and soil form change?

Properties of materials

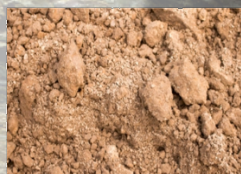
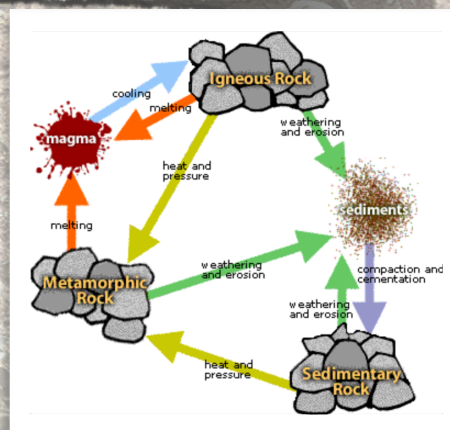
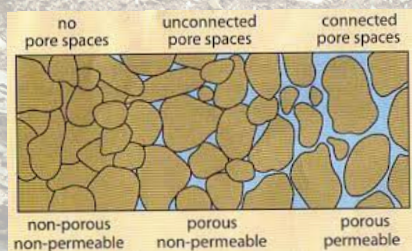
Key learning

- 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

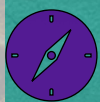
Working scientifically concepts

- Observing and measuring
- Asking questions
- Recording data

Key scientist - Mary Anning
Mary Anning was a famous fossil hunter from England who lived about 200 years ago. As a child, she searched the beaches near Lyme Regis for fossils hidden in the rocks. She discovered amazing dinosaur and sea creature fossils that helped scientists learn about life long ago. Even though she did not go to university, Mary became one of the most important fossil experts in history!



Key vocabulary	
Igneous rock	Rock that has been formed from magma or lava. e.g Obsidian, granite and basalt.
Metamorphic rock	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure. E.g. Marble, quartzite and slate.
Sedimentary rock	Rock that has been formed by layers of sediment being pressed down hard and sticking together. E.g. Chalk, sandstone and limestone.
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 liquid to pass through it.
Impermeable	Does not allow liquid to pass through it.
Fossilisation	The process by which fossils are made.
Erosion	When water, wind or ice wears away land.



Properties of materials - Our Learning Journey

EYFS/ Year 1

- Identify materials and their properties.

Year 2

- Compare suitability of materials and impact of changes

Year 3

- Compare rocks and soils and describe fossil formation.

Year 4

- Observe and measure changes of state.

Year 5

- Explain reversible and irreversible changes of state.



Ethics

Do significant rock and fossil findings belong to researchers and museums or is it a case of 'finders keepers'?