

What natural objects link science with history and geography? Are all rocks the same? (Year 3)



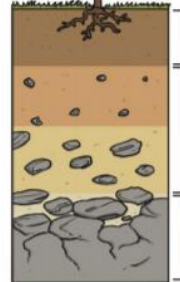
Types of Rocks

Igneous rocks



Igneous

- Formed from the solidification of molten rock (magma or lava).



topsoil

subsoil

bedrock

Sedimentary rocks



Sedimentary

- Formed at the Earth's surface from the accumulation and cementation of fragmented pieces of older rock produced by weathering.

Metamorphic rocks



Metamorphic

- Rocks that have undergone physical changes as a result of exposure to extreme pressure, temperature and fluids.

Did our local area always look like it does? Are there clues within our ground that tell us what life was like many years ago?

Key vocabulary

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.
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.

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.



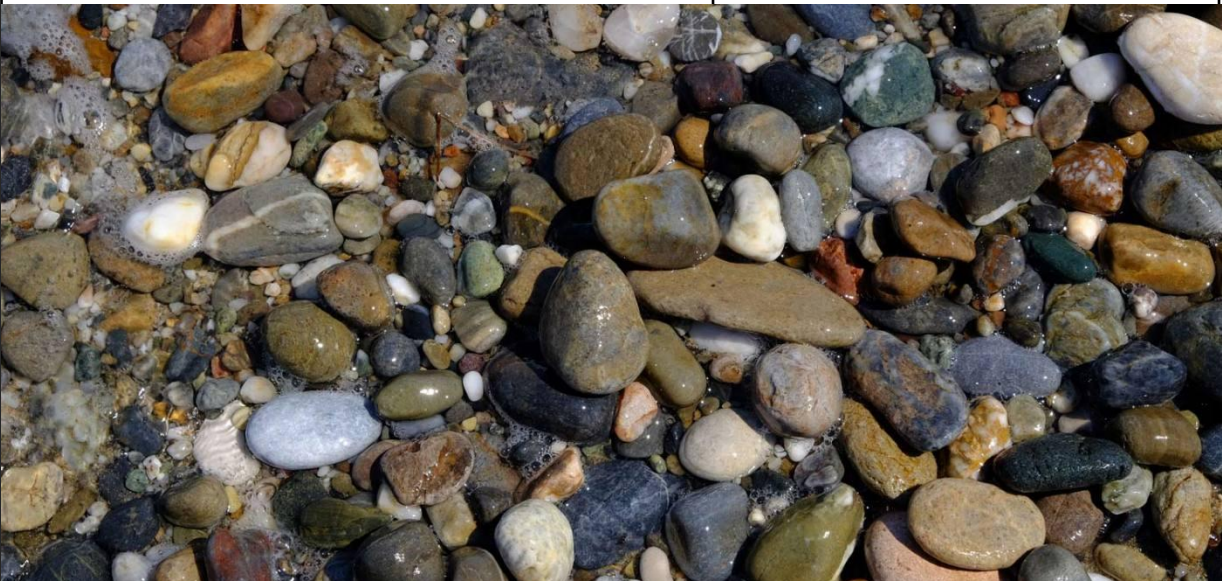
Changes in sea level take place over a long period.



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





Prior Learning (Development matters/Year 1)	Local links	Unit Objectives
<ul style="list-style-type: none"> - Explore the natural world around them - Describe what they see, hear and feel - Describe the simple physical properties of a variety of everyday materials - Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	<ul style="list-style-type: none"> • What is the soil around Newton made of? • How has stone been used for building in Newton? • British Geological Survey- rock classification in your local area 	<ul style="list-style-type: none"> - 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.
		<p>Where next? The period table and the properties of elements? (Year 8)</p> 