

Knowledge Progression

Can I investigate different types of rocks and where they

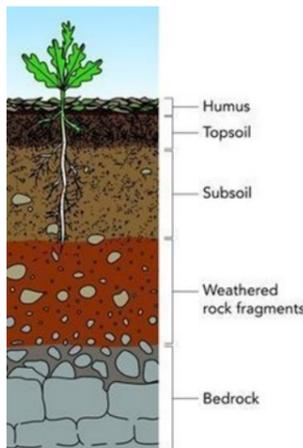
Can I explore how rocks are formed?

Can I compare and group together different kinds of rocks on the basis of their appearance and simple physical properties?

Can I investigate the properties of rocks?

Can I explain what fossils are and how they are formed?

Can I investigate soil and recognise that soils are made from rocks and organic matter?



Year 3 Rocks
Science Knowledge Organiser
Knowledge Skills Vocabulary



Curriculum Coverage

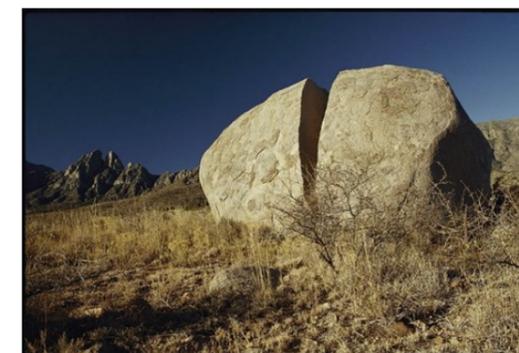
- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock
- Recognise that soils are made from rocks and organic matter.

Skills Progression

- To be able to make careful observations.
- To be able to set up simple comparative tests.
- To be able to measure using beakers and syringes.
- To be able to present information in different ways.

Scientific Vocabulary

Igneous- Rock that has been formed from lava or magma
Sedimentary- rock that has been formed by layers of sediment being pressed own hard and sticking together.
Metamorphic- 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)
Soil- the uppermost layer of the Earth. It is a mixture of: minerals; air; water; organic matter (living and dead plants and animals)
Names of rocks - Chalk, limestone, granite, basalt, sandstone, flint, slate, shale, marble
Types of minerals - Calcite, feldspar, topaz, diamond, talc, corundum
Properties of rocks - Hard/soft, permeable/impermeable, durable (resistant to weathering)
Permeable- allows liquid to pass through it
Impermeable- does not allow liquid to pass through it (waterproof)
Processes - Heat, pressure, erosion, transportation, deposition, melt, solidify
Erosion- when water, wind or ice wears away land (weathering)
Size of rocks - Grain, pebbles
Rock describing words - Crystals, layers
Fossil- the preserved remains or traces of a dead organism
Fossilisation- the process by which fossils are made
Palaeontology- the study of fossils

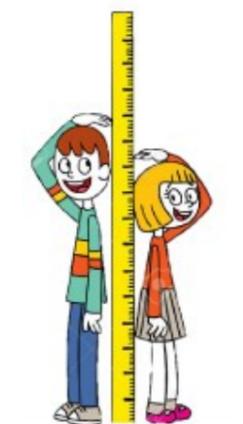


Scientific Enquiry

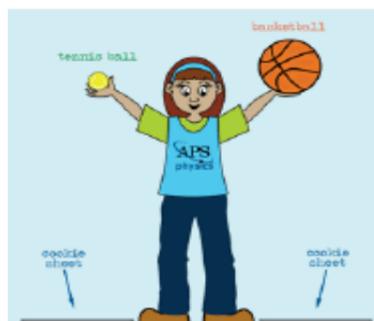
What do the different rocks look like? Where are the rocks in the world? Where are the rocks in the UK? Which are the rocks near our school? How were rocks formed? Which rock is the most permeable? How hard are different rocks? How are fossils made? What are soils made from? Which types of soil do you have? How can we separate the different parts that make up a soil?

Natural or Man-Made

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



Pattern Seeking



Fair Testing



Identifying and Classifying



Researching



Observing over Time

