

## Year Three- Term 4 – Science – Rocks and Fossils



Prior knowledge/Key knowledge	
Year 2 prior knowledge	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
Igneous	Rock that has formed from magma or lava. It includes obsidian, basalt and granite.
Sedimentary	Rocks formed by layers of sediment being pressed down hard and sticking together. You can see the layers. Includes chalk, sandstone and limestone.
Metamorphic	Rock that started out as igneous or sedimentary rock but has changed due to extreme pressure or heat. Includes marble, quartz and slate.
Soil	Soil is the uppermost layer of the Earth. It is a mixture of: <ul style="list-style-type: none"> <li>Minerals (which come from finely ground rock)</li> <li>Air</li> <li>Water</li> <li>Organic matter (dead plants and animals)</li> </ul>
Layers of soil	Soil is made up of 3 key layers: <ul style="list-style-type: none"> <li>Top soil</li> <li>Sub-soil</li> <li>Base rock</li> </ul>

Vocabulary	
magma	Molten (melted) rock that stays underground.
lava	Molten (melted) rock that comes out of the ground, in a volcanic eruption for example.
sediment	Small pieces of rock or other natural materials that are moved and dropped in a different place by water or wind.
permeable	Allows liquid to pass through it.
impermeable	Does not allow water to pass through it.
durable	How strong something is. For example, how resistant is a rock to being worn down by the weather.
density	How tightly packed the particles of the rock are. A small and heavy rock would have a high density. A large, light rock would have a low den
erosion	When water, ice or wind wears away land.
fossilisation	The process by which fossils are made. This happens over many thousands of years.
palaeontology	The study of fossils.

### Key skills/investigation focus

Investigative focus

**Identify and classify**  
Explore the composition of different soils.

Examine different types of rocks according to their characteristics.

### Big Questions/Challenging Perceptions

#### Do rocks stay the same forever?



#### 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.

