



# SCIENCE: Rocks and Soils

Spring B

Year 3

## Key Ideas

Rocks	Solid mineral materials forming part of the surface of the Earth.
Soils	Mineral or organic material on the immediate surface of the Earth.
Fossils	The remains or impression of a prehistoric plant or animal embedded in rock.

## Key Questions

- How are fossils formed?
- What do fossils tell us about the past?
- What are the 3 types of rock?
- What is soil made from?
- What are the 3 layers of soil called?

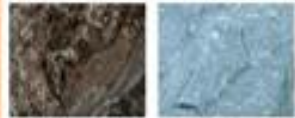
Key words	Explanation
igneous rock	Rock that has been formed from magma or lava.
Sedimentary rock	Rock that has been formed by layers of sediment being pressed down hard and sticking together. You can see the layers of sediment in the rock.
Metamorphic rock	Rock that started out as igneous or sedimentary 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 is called lava.
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.
Paleontology	The study of fossils.
Erosion	When water, wind or ice wears away land.

# Rocks

## Metamorphic



Gneiss Marble



Anthracite Slate



Quartzite Schist

## Sedimentary



Limestone Sandstone



Shale Dolomite

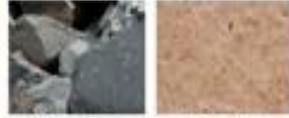


Conglomerate Travertine

## Igneous



Granite Pumice

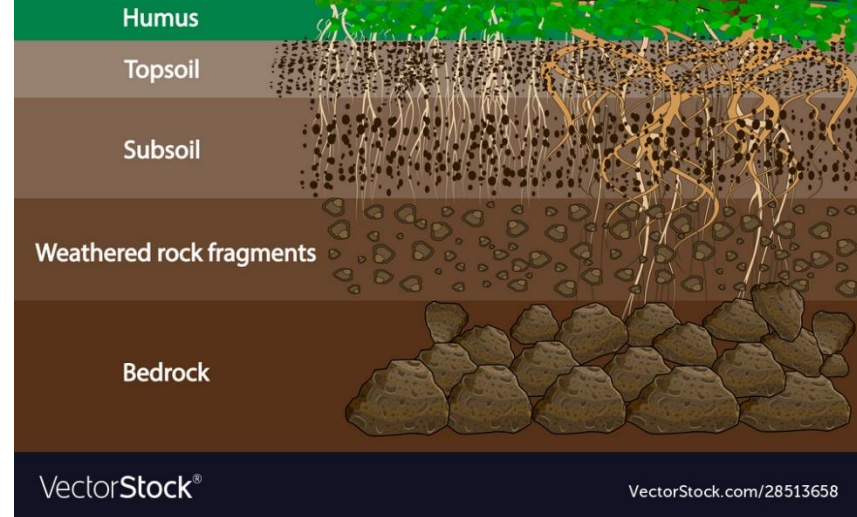


Obsidian Rhyolite



Basalt Andecite

# Soil layers



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## 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.

