

# Knowledge Organiser

## Science - Rocks and Fossils

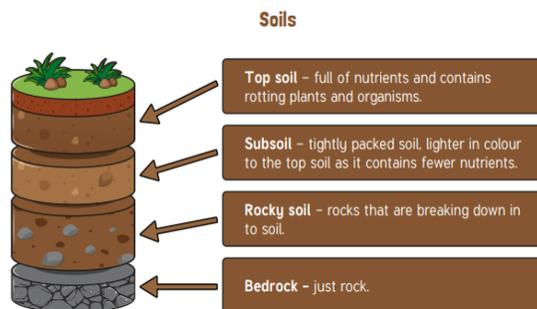
### What should I should already know...

- I have identified and named a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.
- I have described the simple physical properties of a variety of everyday materials.
- I have compared and grouped together a variety of everyday materials on the basis of their simple physical properties.
- I have identified and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
- I have found out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

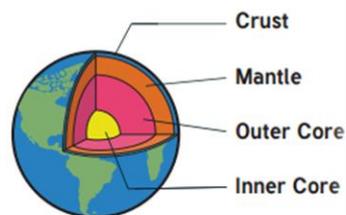
### What will I know by the end of the unit?

- I will compare and group different kinds of rocks on the basis of appearance and simple physical properties.
- I will describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- I will find out that soils are made from rocks and organic matter.

If you dig down anywhere on Earth you will find rock. Rocks can be hard, soft, permeable or impermeable, depending on what type of rock it is. Slate, marble, chalk and granite are all different types of rock and all have different uses.



A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called fossilisation.



### Key Vocabulary

<b>igneous rock</b>	Rock that has been formed from magma or lava.
<b>sedimentary rock</b>	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.
<b>metamorphic rock</b>	Rock that started out as igneous or sedimentary rock but changed due to being exposed to extreme heat or pressure
<b>magma</b>	Molten rock that remains underground.
<b>lava</b>	Molten rock that comes out of the ground is called lava.
<b>sediment</b>	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand
<b>permeable</b>	Allows liquids to pass through it.
<b>impermeable</b>	Does not allow liquids to pass through it.

### Key people

**Mary Anning (1799 –1847)** was an English fossil collector, dealer, and palaeontologist who became known around the world for important finds she made in Jurassic marine fossil beds in the cliffs along the English Channel at Lyme Regis in the county of Dorset in Southwest England.

**Inge Lehmann (1888 –1993)** was a Danish seismologist and geophysicist. In 1936, she discovered that the Earth has a solid inner core inside a molten outer core.

### Key Questions

- What is a rock?
- How do rocks change over time?
- Why do rocks change over time?
- How are fossils formed?
- What is soil made of?

Under our feet is a layer of rock. This layer of rock is under every town and city, under fields and forests and even under the sea!

### Useful web links

<https://www.bbc.co.uk/bitesize/topics/z9bbkqt>