

# Knowledge Organiser - Science - Year 3 - Spring 1 - 2025

## Rocks and Fossils



### STICKY KNOWLEDGE

|  |   |   |
|--|---|---|
| The layers of the Earth are the crust, mantle, outer core and inner core.                | There are 3 types of rock that are formed on Earth                      | Layers, crystals and crumbly textures helps us to classify and sort rocks.                |
| Chemical, physical and biological weathering effects rocks and changes their appearance. | Fossils are formed when things that have lived are trapped within rocks | Soil is made from rocks and organic matter. Sand, silt and clay are 3 main types of soil. |

### Key Scientist:

Mary Anning was an English fossil collector and palaeontologist who became known around the world for the discoveries she made in Jurassic marine fossil beds in the cliffs along the English Channel.



### KEY VOCABULARY

|                    |   |
|--------------------|---|
| <b>Igneous</b>     | Rock that has formed by the cooling and hardening of molten lava or magma.                                    |
| <b>Metamorphic</b> | Rock that started out as igneous or sedimentary but changed due to being exposed to extreme heat or pressure. |
| <b>Sedimentary</b> | Rock that has been formed by layers of sediment being pressed down hard and sticking together.                |
| <b>Permeable</b>   | Allows liquid to pass through it.   |
| <b>Impermeable</b> | Does not allow liquids to pass through it.  |
| <b>Fossils</b>     | The remains or traces of plants and animals that lived a long time ago.                                       |

| Natural Rocks  |  |  | Human-Made Rocks   |
|--|--|--|--|
| Igneous  | Sedimentary  | Metamorphic  |  |
| Obsidian<br> | Chalk<br>     | Marble<br>    | Brick<br>       |
| Granite<br>  | Sandstone<br> | Quartzite<br> | Concrete<br>    |
| Basalt<br>   | Limestone<br> | Slate<br>     | Coade Stone<br> |

