



**Rocks are all around us - underground, on beaches, in garden and used for buildings, walls and lots of other useful things.**

### Some rocks are hard

Hard rocks are **difficult** to **scratch** or to break into bits.

You can **polish** hard rocks and make them shiny and smooth.

Hard rocks are used for building.

- **Marble**
- **Granite**
- **Flint**



### Some rocks are soft

Soft rocks can **scratch easily** and can **crumble**.

Examples of soft rock are:

- **Chalk**
- **Limestone**



### Some Rocks are Impermeable

This means that they **don't allow water to soak through**. Most hard rocks are impermeable like **marble** and **slate**. These are used for roof tiles and building to make are they are waterproof. **Permeable** rocks allow water to soak through.



Try dropping a small amount of water on your rock samples and watch to see if it soaks in



### Key vocabulary

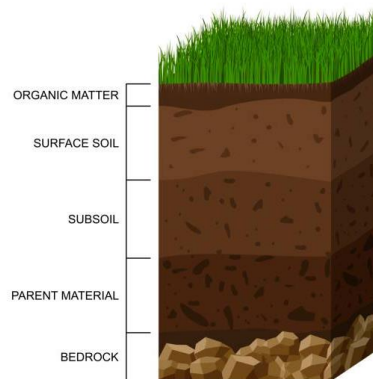
|                         |                                                        |
|-------------------------|--------------------------------------------------------|
| <b>fossil</b>           | The remains or trace of an animal living from long ago |
| <b>sedimentary rock</b> | Rock formed by the build-up of sediment                |
| <b>metamorphic rock</b> | Rock formed by pressure and heat                       |
| <b>igneous rock</b>     | Rock that is formed by the cooling of magma            |
| <b>amber</b>            | A type of fossil that comes from the resin of plants   |
| <b>magma</b>            | Hot liquid matter that cools to form igneous rock      |
| <b>preserved</b>        | Kept safe from harm or damage                          |
| <b>decay</b>            | To rot and decompose                                   |
| <b>permeable</b>        | Whether a substance allows water to pass through it    |
| <b>erosion</b>          | Wearing away of the earth's surface by wind or water   |

### Fossils and Mary Anning

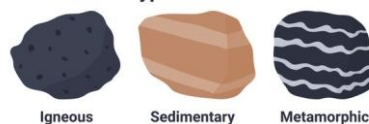
Some rocks contain fossils, these are the remains of living things from millions of years ago that have got squashed between layers of rock. The soft bits have rotted leaving the fossil.



### SOIL LAYERS



### Types of Rock



### 3 Major Rock Types

- **Igneous**
  - Formed from the solidification of molten rock (magma or lava).
- **Sedimentary**
  - Formed at the Earth's surface from the accumulation and cementation of fragmented pieces of older rock produced by weathering.
- **Metamorphic**
  - Rocks that have undergone physical changes as a result of exposure to extreme pressure, temperature and fluids.

