

## KNOWLEDGE ORGANISER

### Year 3 Science

### Rocks and Soils

#### Key Skills

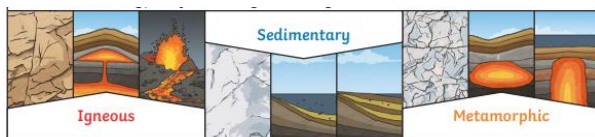
- Compare and group together different kinds of rocks based on their appearance and simple physical properties.
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock
- Recognise that soils are made from rocks and organic matter.

#### Vocabulary

<b>Igneous rock</b>	Rock that has been formed from <b>magma or lava</b>
<b>Sedimentary rock</b>	Rock that has been formed by layers of <b>sediment</b> 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 <b>igneous rock or sedimentary rock</b> , 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.
<b>Sediment</b>	Natural solid material that is moved and dropped off in a new place by water or wind, e.g. sand.
<b>Fossilisation</b>	The process by which fossils are made.
<b>Palaeontology</b>	The study of fossils
<b>Erosion</b>	When water, wind or ice wears away land.

#### Rocks

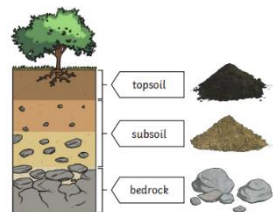
There are three types of naturally occurring rock



#### Soil

Soil is the uppermost layer of the Earth. It is a mixture of different things:

- Minerals (the minerals in soil come from finely broken-down rock)
- Air
- Water
- Organic matter (including living and dead plants and animals)



#### Fossilisation

**Step 1** - An animal dies. It gets covered with sediments which eventually become rock.

**Step 2** - More layers of rock cover it. Only hard part of the creature remain, e.g. bones, shells and teeth.

**Step 3** - Over thousands of years, sediment might enter the mould to make it a **cast fossil**.

Bones may change to mineral, but they will stay the same shape.

**Step 4** - Changes in sea level take place over a long period of time.

**Step 5** - An erosion and weather take place and eventually the fossil becomes exposed.

