

# Key facts

## Soils





Soil is one of the three major natural resources, alongside air and water.

- Soils are made up of pieces of ground down rock which may be mixed with plant and animals matter.
- The type of rock, size of rock pieces and the amount of organic matter affect the property of the 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).

## Fossils

- Some rocks contain fossils.

The property of soils is affected by the:  
 type of rock  
 size of rock pieces  
 amount of organic matter in it.

<b>Peat</b> 	- water-logged - contains partially decomposed plant material - soft and easily compressed
<b>Sandy soil</b> 	- light and dry lots of air gaps so water drains through quickly
<b>Chalky soil</b> 	- stony and water drains through quickly - found in areas with lots of chalk
<b>Clay soil</b> 	- very sticky when wet - a heavy soil - water does not drain through it quickly

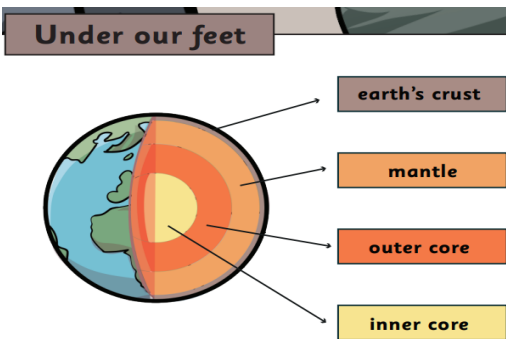


## Year 3 Science

### Spring 1

## Fossils and Soils

### Science strand: Chemistry



**Fossils were formed millions of years ago.**

- 1 Plants and animals died and sank to the seabed.
- 2 The soft parts decayed away leaving the hard parts.
- 3 The hard parts were covered and squashed by many layers of sand and other materials.
- 4 The animal/plant matter dissolves and is replaced by minerals, leaving a replica of the original bone called a fossil.



- Top soil** which is full of nutrients and contains rotting plants and organisms.
- Subsoil** which is tightly packed soil, lighter in colour to the top soil as it contains fewer nutrients.
- Rocky soil** which is rocks that are breaking down in to soil.
- Bedrock** which is just rock.



## Vocabulary

Word	Definition
Skeleton	A collection of bones
Fossilisation	the process through which a fossil is formed
Fossils	The remains or trace of a living thing that lived a long time ago.
Sediment	Small pieces of soil, sand, gravel and small rocks.
rock	A natural material found on or underneath the Earth's crust
Shell	A hard covering on the outside of an animal's body.
nutrients	chemical compounds found in food that the body uses to function and stay healthy
Soil	a mixture of small rocks, organic matter and water
Deforestation	intentional clearing or cutting down of forests