Chemistry

Science Y3: Rocks and Soils

Vocabulary

permeable allows liquids or gases to pass through it.

Impermeable does not allow liquids or gases to pass through it.

porous if something is full of tiny holes or openings, you can describe it as porous. For example, a sponge is porous.

crystal crystals grow in regular, repeating 3D patterns e.g. hexagons or octagons. Examples of crystals are diamonds, salt and snowflakes. Crystals are often found within rocks.

rock a rock is a solid mineral material forming part of the surface of Earth and other similar planets. It might be exposed on the surface or it might be hidden under soil.

fossil the preserved remains or impressions of a living organism such as a plant, animal, or insect. Some fossils are very old. Studying fossils helps scientists to learn about the past history of life on earth.

There are three types of rocks:

Igneous rocks are formed from molten rock that has cooled and solidified. Examples include **basalt, granite and pumice.**

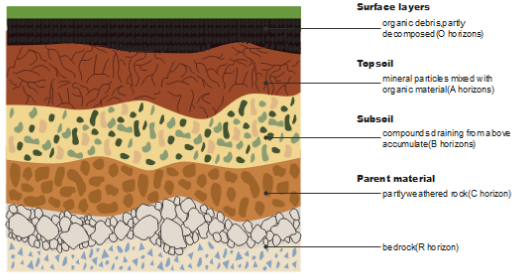
Sedimentary rocks are formed from the broken remains of other rocks that become joined together. Examples include **limestone and sandstone.**

Metamorphic rocks are formed from other rocks that are changed because of heat or pressure. Examples include **marble and slate.**

Types of soil:

Soil is a mixture of tiny particles of **rock, dead plants and animals, air and water**. Different soils have different properties depending on their composition. Sandy soil is pale coloured and has large particles. Clay soil is usually sticky and has small particles. Peat does not contain any rock particles. It's made from very old decayed plants and is dark, crumbly and rich in nutrients.

Soil Layers



Scientists

James Hutton
(3rd June 1726 – 26th March 1797)

Links to prior learning and next steps:

Materials (Y1 and Y2)

Links to other subjects:

Maths: statistics – tables and charts

Computing: fossil animation