

SCIENCE: WHAT ROCK IS THIS? (ROCKS, SOILS AND FOSSILS)

Key Vocabulary

Appearance, compare, drain, flood, layer, similar, structure, texture. Evidence. identifying and classifying, microscope, crystal/crystalline, erosion, fossil, hardness, organic, palaeontologist, remains, rock, sediment, weathering. comparative test, enquiry, identify, observe/observation, test, absorb/absorbent, durable, material property

Working Scientifically

We will be comparing and grouping together different kinds of rocks on the basis of their appearance and simple physical properties. We will recognise that soils are made from rocks and organic matter. We shall describe in simple terms how fossils are formed when things that have lived are trapped within rock. We will set up simple practical enquiries, comparative [and fair] tests and make systematic and careful observations [and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers].

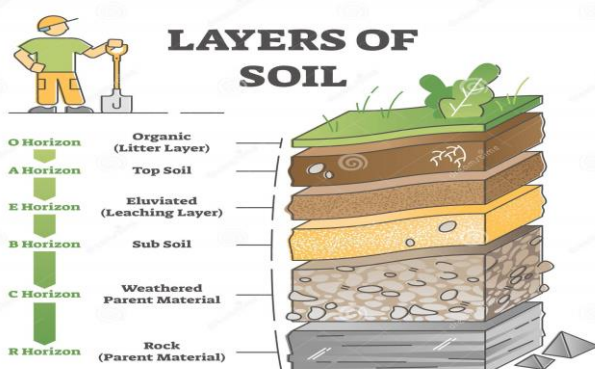
Must – know knowledge

Rocks are naturally occurring materials which make up the Earth's surface. They can be hard or soft as well as having other different properties. They may absorb water. They have different sizes of grain or crystal.

Soils are made up of pieces of broken-down rock which may be mixed with organic matter, for example, animal or plant remains. Soils are formed when rocks are broken down. For example, this can be caused by water, wind, temperature change, gravity or living things.

A fossil is generally defined as any evidence of plant or animal matter from a past geological age embedded in rock. They are typically more than 10,000 years old. Most of the organisms from which fossils are formed would have been found in the sea. When they died, their remains dropped to the floor of the ocean. Layers of sediment were deposited on top of them over many centuries. The pressure of the rock building up over time caused the remains to change and become fossilised.

Diagram: Soil layers



Experiments:

Identify different soil samples