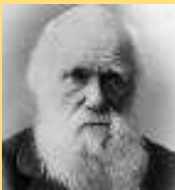




Key People/Scientists



William Smith (1769-1839)
An English geologist credited with creating the first detailed, nationwide geological map of any country.



James Hutton (1726-1797)
A British geologist and physician. He was the originator of explaining the features of the Earth's crust in relation to natural processes.

Key Questions

What are the three main different types of rocks?	The three main types, or classes, of rock are sedimentary, metamorphic, and igneous. Their differences are dependent on how each rock was formed.
How are fossils formed?	Fossils are formed in a number of different ways, but most are formed when a plant or animal dies in a watery environment and is buried in mud and silt for a long period of time.
What is soil made from?	Soil is formed from the weathering of rocks. It is made up mainly of mineral particles, organic materials, air, water and living organisms.

Misconceptions/Key Facts

Misconception: All rocks are hard.

Fact: Rocks have variable hardness with some being harder (granite) or softer (chalk).

Misconception: Fossils are the bones of dead animals and plants.

Fact: The bones of deceased animals lithify and become rocks when minerals are compressed and swapped.

Diagrams/Visual Aids

How Fossils are Made?
Most fossils form when living things die and are buried by sediments. The sediments slowly harden into rock and preserve the shapes of the organisms.

Key Vocabulary

crystals	The process of crystal forming is called crystallisation. Crystals often form in nature when liquids cool and start to harden.
fossils	Fossils are formed when a plant or animal die in watery environment and is buried in mud.
geologist	A geologist is a scientist that studies the surface of the Earth and what it is made of.
igneous	Igneous rocks are formed by the cooling and hardening of lava.
metamorphic	A metamorphic rock has been formed by extreme heat and pressure to the rock in its original state.
organic matter	Matter that has come from a recently living organism.
sedimentary	Sedimentary rocks are formed when sand, mud and pebbles are laid down in layers.
soil	Soil is a mixture of organic matter, minerals, gases, liquids, and organisms that together support life.