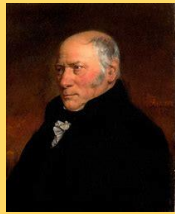




### Key People/Scientists



**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

<b>What are the three main different types of rocks?</b>	The three main types, or classes, of rock are sedimentary, metamorphic, and igneous. Their differences are dependent on how each rock was formed.
<b>How are fossils formed?</b>	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.
<b>What is soil made from?</b>	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

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