

Key Vocabulary

- **Rock:** A solid material made of minerals.
- **Mineral:** A natural substance found in rocks.
- **Fossil:** Remains or traces of ancient living things preserved in rock.
- **Sedimentary:** Rocks formed by layers of sediments pressed together.
- **Igneous:** Rocks formed from cooled lava or magma.
- **Metamorphic:** Rocks changed by heat and pressure.
- **Erosion:** The process of wearing away rocks by wind, water, or ice.
- **Weathering:** The breaking down of rocks into smaller pieces by natural forces.
- **Paleontologist:** A scientist who studies fossils.



Rocks & Fossils

Core Concepts

Types of Rocks: There are three main types of rocks - Sedimentary, Igneous, and Metamorphic.

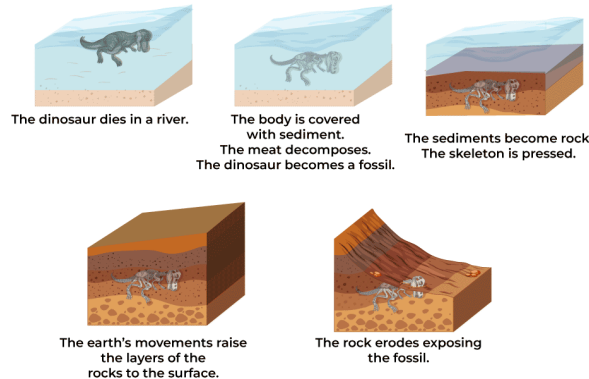
Sedimentary Rocks: Formed by layers of sediments pressed together. Examples: sandstone, limestone.

Igneous Rocks: Formed from cooled lava or magma. Examples: granite, basalt.

Metamorphic Rocks: Formed when existing rocks are changed by heat and pressure. Examples: marble, slate.

Fossils: Fossils are formed when living things die, are buried by sediments, and over time, the sediments harden into rock and preserve their shapes.

Erosion and Weathering: Erosion is when rocks are worn away by wind, water, or ice. Weathering is the breaking down of rocks into smaller pieces by natural forces like temperature changes, plants, and animals.



Key Facts

Sedimentary Rocks:

Formed from layers of sand, mud, and small stones.
Examples: sandstone, limestone.
Often contain fossils.

Igneous Rocks:

Formed when lava or magma cools and hardens.
Examples: granite, basalt.
Found near volcanoes.

Metamorphic Rocks:

Formed when existing rocks are changed by heat and pressure.
Examples: marble, slate.
Can start as sedimentary or igneous rocks.

Fossils:

Formed when plants or animals are buried by sediments.
Over time, the sediments harden into rock.
Fossils help us learn about ancient life.

Erosion and Weathering:

Erosion: Rocks are worn away by wind, water, or ice.
Weathering: Rocks break into smaller pieces due to natural forces.

Uses of Rocks:

Building materials: granite for buildings, marble for statues.
Tools: flint used to make tools in ancient times.
Everyday items: chalk for writing, gemstones for jewellery.



Key Questions

What are the three types of rocks?

How are fossils formed?

What is the difference between erosion and weathering?

Learning Objectives

Understand the types of rocks and their formation.

Learn how fossils are formed and what they tell us.




Recognise processes of erosion and weathering..



Memory Tips



Types of rocks: SIM

 Sedimentary,  Igneous,  Metamorphic

Rock Cycle

Magma cools to form **Igneous**, 

which breaks into **sediment**,
which forms **sedimentary**

which changes under **heat** and **pressure** to
metamorphic, 



BBC
Bitesize

Rocks & Fossils

Sedimentary Rocks



Sandstone

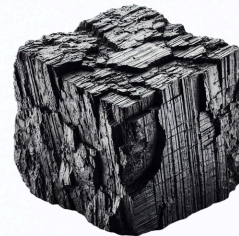


Limestone

Igneous Rocks



Granite



Basalt

Metamorphic Rocks



Slate



Marble



Mary
Anning

Mary Anning was a famous fossil hunter. She lived a long time ago and found many important fossils along the Jurassic Coast in England. Her discoveries helped scientists learn a lot about dinosaurs and other ancient animals.



Charles
Lyell

Charles Lyell was a geologist, which means he studied rocks. He wrote a very important book called "Principles of Geology." This book helped people understand how the Earth changes over time through processes like erosion and weathering.

Self-Assessment

I can name the the three types of rocks



I understand how fossils are formed



I know the difference between erosion and weathering



My Reflections



What do I find most interesting about this topic?
Where do I need to improve?