

Vocabulary

Mineral	A natural substance that makes up rock.
Rock	Made from one or more minerals.
Magma	Hot liquid rock.
Organic matter	Made up of both living and decaying animals and plants.
Hard	Resistant to scratching and pressure.
Density	How compact an object is.
Permeable	Allows water to pass through.
Erosion	Wind and rain gradually wear down rocks forming sediment.
Sediment	Small pieces of land that break down. The sediment can be grains of sand, mud, pebbles, minerals, fossils or plants.

Weathering processes

Physical weathering	Caused by physical processes such as changes in temperature, freezing and thawing, and the effects of wind, rain and waves.
Chemical weathering	Caused by rain water reacting with the mineral grains in rocks to form new minerals (clays) and soluble salts.
Biological weathering	Caused by animals and plants. For example, rabbits and other burrowing animals can burrow into a crack in a rock, making it bigger and splitting the rock.

Types of rock

Igneous rock	Made when magma cools to form rock.
Sedimentary rock	Made when layers of sediment settle on top of each. Over millions of years the bottom layers turn into rock.
Metamorphic rock	Heat and pressure inside the earth can change igneous and sedimentary rock into metamorphic rock.

Fossilisation process

1. Animal dies, its skeleton settles on the sea floor and is buried by sediment.
2. The sediment surrounding the skeleton thickens and begins to turn to stone.
3. The skeleton dissolves and a mould is formed.
4. Minerals crystallise inside the mould and a cast is formed.
5. The fossil is exposed in the Earth's surface.

