

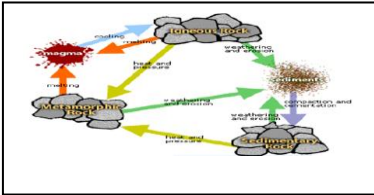


Rocks and Soils - Year 3 Sticky Knowledge Mat

Summer 2



Sticky Knowledge



Rocks have been used by humans for millions of years, from early tools and weapons through to various construction materials.

Soil consists of a mix of organic material (decayed plants and animals) and broken bits of rocks and minerals.

Nutrients in soil help plants to grow & anchor roots in the ground.



FOSSILS

A fossil is the remains or the impression left by a prehistoric plant or animal embedded in rock. It takes place in sedimentary rock because the heat from lava and magma in igneous and metamorphic rock would be too high for fossils to survive.

- 1.) An animal, creature or plant dies and ends up at the bottom of the sea. It gets covered in a layer of rock.
- 2.) Over time, more layers of rock form on top and the only thing which would remain are the bones or the space where the bones used to be (mould fossils).
- 3.) Sometimes sediment enters the space where the bones used to be and takes the shape of the creature (cast fossil).
- 4.) Over a long period, the sea may recede / go back leaving the rock.

Subject Specific Vocabulary

<i>Rock</i>	A hard, solid material that is made of minerals and is found in nature.
<i>Soil</i>	The top layer of the ground, in which plants grow; dirt.
<i>Metamorphic rock</i>	Rock formed when any type of rock goes through changes caused by extreme heat and pressure (e.g. marble, slate).
<i>Igneous rock</i>	Rock formed by the cooling and hardening of hot magma or lava. Formed by volcanoes! (e.g. basalt, granite).
<i>Sedimentary rock</i>	Rock formed when sediment is pressed together over time. Formed over a long period of time (e.g. shale, limestone, sandstone).
<i>Rock cycle</i>	The series of changes that rock undergoes over time as it shifts between different types.
<i>Fossil</i>	The remains of a plant or animal that turned to stone over a long period of time. Mostly found in sedimentary rock.
<i>Weathering</i>	The process of wearing away or otherwise changing Earth's surface, caused by natural forces.
<i>Erosion</i>	The process of transporting and wearing away rocks or soil as loose articles that are moved by water, wind, ice or gravity.



Natural Disasters - Year 3 Knowledge Mat

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Exciting Books



Subject Specific Vocabulary

Eruption	An explosion of steam or lava from a volcano.
Aftershock	A shaking event that follows an earthquake. Sometimes more damaging than the original earthquake.
Tsunami	A long, high wave usually caused by an earthquake in the ocean.
Magma	Hot fluid or semi-fluid material below or within the Earth's crust from which lava is formed.
Lava	Hot, molten or semi-fluid rock erupted from a volcano, or solid rock resulting from cooling of this.
Dormant	A dormant volcano is an active volcano that has not erupted in the past 10,000 years.
Fault	Fractures in Earth's crust where rocks on either side of the crack have slid past each other.
Magnitude	If you talk about the magnitude of something, you are talking about its great size
Landslide	A collapse of a mass of earth or rock from a mountain or cliff
Tectonic plates	The Earth's outer shell is made up of huge slabs of moving rock called tectonic plates.
Saturated	Holding as much water or moisture as can be absorbed; thoroughly soaked.

Important Bits

A hurricane is a large rotating storm with high-speed winds that forms over warm waters in tropical areas.

Flooding occurs when a river bursts its banks and overflows onto the surrounding land.

Sticky Knowledge about Natural Disasters

- ☐ **Volcanoes** are caused when magma rises to the surface of the Earth, which causes bubbles of gas to appear in it. This gas can cause pressure to build up in the mountain, and it eventually explodes.
- ☐ **Earthquakes** are usually caused when rock underground suddenly breaks along a fault. This sudden release of energy causes the seismic waves that make the ground shake.
- ☐ A **tsunami** is a series of large waves generated by an abrupt movement on the ocean floor that can result from an earthquake, an underwater landslide, a volcanic eruption or - very rarely - a large meteorite strike.