

Year 3, Autumn 2, Science Key Learning: Stones and Bones 2

Vocabulary / Key Terms

Rocks	Fossils, stone, sandstone, chalk, granite, marble, pumice, crystals, absorbency
Rock types and properties	Natural, man-made, igneous, sedimentary, metamorphic, hard, soft, permeable, impermeable, durable, density
Fossils	Palaeontologist, ammonite, belemnite, cast fossil, Jurassic, organism, fossilised, extinct, erosion
Scientific Enquiry	Prediction, comparative, observations, record, research, enquiry, classify, conclusion
Significant Scientists	Mary Anning and Kamoyia Kimeu

Useful websites:

<https://kids.kiddle.co/Rocks>

<https://www.bbc.co.uk/bitesize/topics/z9bbkqt/articles/z2ym2p3>

<https://www.bbc.co.uk/bitesize/topics/z9bbkqt/articles/zsgkdmn>

<https://www.dkfindout.com/us/dinosaurs-and-prehistoric-life/fossils/>

Important Facts

Rocks fall into two main categories: man-made (such as bricks or concrete) and natural (see vocabulary for different types).

There are three types of natural rock called igneous, sedimentary and metamorphic.

Igneous rocks are formed in two ways:

- (a) When molten rock underground (called magma) cools and hardens under the ground.
- (b) When molten rock comes out of the ground (called lava) and cools and hardens.

Sedimentary rocks are formed under the sea. Due to erosion, bits of rock end up in lakes and rivers, and are transported and deposited at the bottom of the sea (known as 'sedimentation'). More layers, known as strata pile up and press down on the lower layers (known as 'compaction'). Over time, water is pushed out of the layers and 'cementation' occurs—this is when salt compounds cement the bits of rock together to form a solid layer.

Metamorphic rocks are formed when sedimentary and igneous rocks experience intense heat and pressure as a result of being near magma or earth movements causing them to be buried or squeezed.

Fossils are formed when an animal dies and the soft parts of its body decompose, leaving the skeleton behind. This becomes buried by small particles of rock called sediment that layer up and compact to rock. The bones then dissolve and leave a rock replica of the skeleton.

