

Key Vocabulary

rock	A naturally occurring material made of minerals. They can be different sizes: <ul style="list-style-type: none"> • stones • pebbles • boulders
fossil	The bones or other remains of living things are sometimes preserved in rocks as fossils.
soil	Ground up rock mixed with plant and animal remains.

Soils

The property of soils is affected by the:

- type of rock
- size of rock pieces
- amount of organic matter in it.

Peat



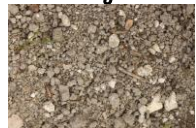
- water-logged
- contains partially decomposed plant material
- soft and easily compressed

Sandy soil



- light and dry
- lots of air gaps so water drains through quickly

Chalky soil



- stony and water drains through quickly
- found in areas with lots of chalk

Clay soil



- very sticky when wet
- a heavy soil
- water does not drain through it quickly

Rocks - Year 3

Significant scientists

Mary Anning (1799-1847)



Mary Anning was an English palaeontologist and fossil collector. She became known around the world for important finds she made in Jurassic fossil beds in Dorset.

Holly Betts *PhD student, University of Bristol*
Holly is a palaeobiologist. She is researching whether fossils are best for establishing a timescale for recent and ancient episodes in our evolutionary history.

Fossils were formed millions of years ago.

- 1 Plants and animals died and sank to the seabed.
- 2 The soft parts decayed away leaving the hard parts.
- 3 The hard parts were covered and squashed by many layers of sand and other materials.
- 4 The animal/plant matter dissolves and is replaced by minerals, leaving a replica of the original bone called a fossil.

Animal fossil



Plant fossil



Types of rocks

Sedimentary

It is formed when small pieces of rock and soil, called sediments, become compact due to pressure and then crystals are formed between the layers resulting in cementation.

chalk

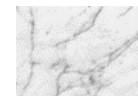


Chalk is used for drawing because it is crumbly and soft.

Metamorphic

It is formed when heat and pressure inside the Earth change igneous and sedimentary rock.

marble



Marble is good for gravestones because it does not rub away.

Igneous

It is formed when magma or lava cools and solidifies.

granite



Granite is good for worktops because it is hard and does not absorb water.

Words to describe the appearance of rocks:

