

Science: Rocks and Soils

Year 3: Autumn 2

Key Vocabulary

rock	The solid mineral material forming part of the surface of the earth and other similar planets, exposed on the surface or underlying the soil.
layers	A sheet, quantity, or thickness of material, typically one of several, covering a surface or body.
texture	The feel, appearance, or consistency of a surface or substance.
sedimentary	Type of rock made when sand, mud and pebbles get laid down in layers.
igneous	Type of rock formed by solidification of cooled magma (molten rock) either below or above the surface of the earth.
metamorphic	Type of rock which has been changed by extreme heat and pressure.
soil	The upper layer of earth in which plants grow, a black or dark brown material typically consisting of a mixture of organic remains, clay, and rock particles.
compacted	Firmly packed or pressed together.
fossil	The remains or traces of plants and animals that lived long ago.

Why don't you...

- Create a non-chronological report about different types of rocks?
- Investigate which animals live in different types of rocks and soils?
- Create your own sculptures outside using rocks and soils? Take a photo of your masterpiece!

Website Links

<https://www.ducksters.com/science/rocks.php>

<http://www.sciencekids.co.nz/sciencefacts/earth/rocksandminerals.html>

Enquiry Questions

- Are all rocks the same?
- Which rock would make the best sculpture for outside?
- What is the difference between sedimentary, metamorphic and igneous rocks?
- Do rocks change over time? How long will it take?
- How are fossils formed?
- Is soil the same wherever you go?
- What soil do you have in your garden? Is it different to soil from your school's garden?

Scientific Concepts

Changes

The act of something becoming something different.

Comparison

To compare two or more things, including their similarities and differences.

Scientific Knowledge

- Compare and group together different kinds of rocks on the basis of their appearance and simple physical properties.
- Describe in simple terms how fossils are formed when things that have lived are trapped within rock.
- Recognise that soils are made from rocks and organic matter.

Scientific Skills

- Use different ideas and suggest how to find something out. Make and record a prediction before testing.
- Plan a fair test and explain why it was fair.
- Set up a simple fair test to make comparisons.
- Explain why they need to collect information to answer a question.
- Obtaining and presenting evidence.
- Measure using different equipment and units of measure.
- Record their observations in different ways.
- Describe what they have found using scientific words.
- Make accurate measurements using standard units.
- Considering evidence and evaluating.
- Use a range of equipment (including a data-logger) in a simple test.