Rocks

Carclaze Primary School Science Knowledge Organiser

Year 3



Prior learning to reactivate

This is the first time this subject is explicitly taught within the Primary Curriculum.

- Describe the simple physical properties of a variety of everyday materials (Year 1)
- Compare and group materials (Year 1)
- Uses and suitability of materials (Year 2)

Key learning

Rocks can be described by their properties e.g. colour and texture, shape and size, streaks/patterns and lustre, such as earthy, metallic, greasy, and silky.

Rocks can be grouped on the basis of their appearance and properties.

Fossils are formed when things that were living are trapped within rock.

Soils are made from rocks and organic matter (leaf mould, manure, compost and green manure).

Names of some rocks (granite, slate, limestone, marble, chalk, sand, sandstone, shale, clay, basalt, obsidian).

Key vocabulary	
Sedimentary rock	Rocks made up of lots of other pieces of rock. Eventually, layers of soil and mud help the little pieces to form a whole rock.
Metamorphic rock	Rocks that have been changed over time with extreme heat and pressure underground. It is made up of different types of rocks which make up the different layers and colours.
Igneous rocks	Rocks that are made from hot molten lava, found deep down below the earth's crust. An igneous rock is formed when the rock cools and hardens.
Fossil	Stone remains of plants and animals from thousands of years ago.
Durable	Able to withstand wear, pressure or damage.
Per meable	Lets water through.
Non- permeable	Does not let water through.
Lustre	A gentle sheen or soft glow
Organic matter	Matter that has come from a recently living organism

SCIENTIFIC SKILLS

By the end of the year, children should be able to...

- Ask their own questions relating to the topic
- Make predictions about the outcomes of investigations
- Set up simple practical investigations
- Be able to identify simple ways in which a fair test can be created
- Make simple observations, including through the use of a range of recording/ measurement equipment
- Gather and record data
- Present data in a variety of ways, including diagrams, charts, tables, and graphs
- Draw simple condusions on results and link back to the theory discussed
- Suggest improvements for further investigations

Opportunities for scientific enquiry within the unit:

- Using a hand lens or microscope to help them to identify and classify rocks according to whether they have grains or crystals, and whether they have fossils in them
- Explore different soils and identify similarities and differences between them
- Investigate what happens when rocks are rubbed together or what changes occur when they are in water
- Explore how fossils are made.



