Rocks and Soils: Year 3 Knowledge Mat

Subject Specific Vocabulary

Layers	
Rock	Solid mineral material forming part of the surface of the earth and other similar planets.
Stone	Hard solid non metallic mineral mater of which rock is made
Pebble	A small stone made smooth and round by the action of water or sand
Boulder	Large rock typically one that has been worn smooth by erosion
Fossil	Remains or impression of a prehistoric plant or animals embedded in rock.
Crystals	They are special kind of solid materials where the molecules fit together in a repeating pattern.
Sandstone	Sedimentary rocks consisting of sand grains cemented together
Slate	A fine grained grey, green or bluish-purple metamorphic rock easily split into smooth flat plates.
Texture	The feel, appearance or consistency of a surface or a substance.

Facts about rocks and soils

- Rocks are made of one or more minerals
- Granite rocks can be very old, some granite in Australia is believed to be more than 4 billion years old.
- There are three main classifications of rocks, based on the way the rock was formed: Sedimentary, metamorphic and igneous.
- Soil is at the bottom of the food chain, yet it is the cornerstone of life on earth.
- Igneous rocks are volcanic and form from molten material
- Soil is formed of fine rock particles mixed with air, water and particles form dead plant and animals matter.
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Exciting Books

Primary Science

Rocks and soil – real size science.

Exploring soils and rocks.

Useful websites:

https://www.twinkl.co.uk/resources/keystage2-ks2/ks2-science

https://www.outstandingscience.co.uk/

Year 3 Knowledge Organiser Rocks and Soils

Skills

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- Compare and group together different kind of rocks on the basis of their appearance and simple physical properties.
- Describe in simple term how fossils are formed when things that have lived are trapped with rocks
- Recognise that soils are made form rocks and organic matter

Knowledge

- To know that how and why rocks might have changed over time
- To know that there are different types of rocks and be able to identify them under a microscope to see whether they have grains or crystals and to see if they have fossils in them.
- To have the knowledge to be able to discuss the different kinds of living things whose fossils are found in sedimentary rock and explore hoe fossils are formed
- Pupils to know different soils and identify the similarities and differences between them.
- To know what happens to rocks when they are rubbed together and what changes when they are in water.