



Leamington Primary Science Knowledge Organiser

Year 3 – Rocks

Strand – Chemistry



What I should already know	What I will learn	Important words to help me. (vocabulary)	Ideas for Scientific Enquiry																										
<p>- Soil contains nutrients and these help plants to grow.</p> <p>- The meaning of the word absorb.</p> <p>- That magma is molten rock that is formed in very hot conditions inside the earth.</p> <p>- Why some materials are used for certain purposes because of their properties</p>	<p>What are the different types of rocks?</p> <p>- There are three types of rocks that are formed naturally: Igneous - When molten magma cools, igneous rocks are formed. Examples include granite and basalt. This type of rock is strong, hardwearing and non-porous.</p> <p>- Sedimentary: Sometimes, little pieces of rocks that have been weathered can be found at the bottom of lakes, seas and rivers This is called sediment. Examples include limestone and chalk. Sedimentary rocks are porous and can easily be worn down.</p> <p>- Metamorphic: When some igneous and sedimentary rocks are heated and squeezed (pressured), they form metamorphic rocks. Examples include slate and marble. Metamorphic rocks are strong</p> <p>- Bricks and concrete are not rocks because they are man-made.</p> <p>What are fossils?</p> <p>- Fossils are the remains of prehistoric life. They are usually formed when a living thing (plant or animal) dies and the body is covered up or buried by sediment over tens of thousands of years. Some fossils are formed when the tough bones and teeth in animals, and the woody part of plants are preserved. Other fossils are made from imprints in surrounding sedimentary rock such as footprints or imprints from shells.</p> <p>- Fossils tell us about the Earth and about life that existed hundreds of thousands and millions of years ago.</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Rock</td> <td>A solid mass made up of minerals. Rock forms much of the earth's outer layer, including cliffs and mountains.</td> </tr> <tr> <td>Sedimentary</td> <td>Small pieces of rocks that are layered over years.</td> </tr> <tr> <td>Metamorphic</td> <td>Rocks that have had their original structure changed by pressure and heat.</td> </tr> <tr> <td>Igneous</td> <td>Rocks that are formed by volcanic action or intense heat.</td> </tr> <tr> <td>Weathered</td> <td>Affected by the weather.</td> </tr> <tr> <td>Man-made</td> <td>Things are created by people.</td> </tr> <tr> <td>Mineral</td> <td>Something that is formed naturally in rocks and in the earth.</td> </tr> <tr> <td>Natural</td> <td>Things that exist in nature and are not made by people.</td> </tr> <tr> <td>Nutrients</td> <td>Substances that help plants and animals to grow.</td> </tr> <tr> <td>Sediment</td> <td>Solid material that settles at the bottom of a liquid, especially earth and pieces of rock that have been carried along and then left somewhere by water, ice, or wind.</td> </tr> <tr> <td>Soil</td> <td>The substance on the surface of the earth in which plants grow.</td> </tr> <tr> <td>Absorb</td> <td>Soak up or take in.</td> </tr> <tr> <td>Rock cycle</td> <td>The process by which rocks of one kind change into rocks of another kind.</td> </tr> </table> <div style="text-align: center; margin-top: 10px;"> <p style="text-align: center;">Types of Rocks</p> </div>	Rock	A solid mass made up of minerals. Rock forms much of the earth's outer layer, including cliffs and mountains.	Sedimentary	Small pieces of rocks that are layered over years.	Metamorphic	Rocks that have had their original structure changed by pressure and heat.	Igneous	Rocks that are formed by volcanic action or intense heat.	Weathered	Affected by the weather.	Man-made	Things are created by people.	Mineral	Something that is formed naturally in rocks and in the earth.	Natural	Things that exist in nature and are not made by people.	Nutrients	Substances that help plants and animals to grow.	Sediment	Solid material that settles at the bottom of a liquid, especially earth and pieces of rock that have been carried along and then left somewhere by water, ice, or wind.	Soil	The substance on the surface of the earth in which plants grow.	Absorb	Soak up or take in.	Rock cycle	The process by which rocks of one kind change into rocks of another kind.	<p><u>Classifying and Grouping</u></p> <p>- Explore the types of rocks you can find in the local environment. Explain why rocks are used for different purposes based on properties.</p> <p>- Explore the different kinds of soils including those you can find in the local environment.</p> <p><u>Secondary Sources</u></p> <p>- Research the different living things whose fossils are found.</p> <p><u>Fair / Comparative Testing</u></p> <p>- Compare different types of soils by saying what is similar and what is different using scientific vocabulary.</p> <p>- Sort different types of rocks based on how rough or smooth they are, how permeable they are, how easily they can break down, how strong they are and what they look like.</p>
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<p>- The Earth's outer solid layer, the lithosphere, is made of rock.</p> <p>- The scientific study of rocks is called petrology.</p> <p>- Diamond is the hardest rock known to man. It's name means unbreakable or invincible.</p>																													

