**ROCKS, EROSION AND WEATHERING**

From *Hands on Elementary School Science by Linda Poore, 2003*

**GLOSSARY**

**Westminster College**

|  |  |
| --- | --- |
| **BASALT** | An igneous rock formed when molten rock (lava) reaches the Earth’s surface and cools rapidly. It is a very dense, hard rock, which is dark colored to black. It cooled rapidly, thus it has very small crystals that can be seen with a magnifier. |
| **CHALK** | A sedimentary rock composed of protozoan (tiny microorganism) shells. |
| **CLEAVAGE** | The tendency of some rocks to break along a particular plane. They have flat surfaces often like ‘stair steps’ and sometimes appear layered. |
| **COAL** | A sedimentary rock made of deposits of carbon. Plants decomposed millions of years ago, leaving carbon in the process. |
| **CONGLOMERATE** | A sedimentary rock that is a group of pebbles cemented together with pressure and chemicals in water. |
| **EROSION** | Rocks are changed to smaller pieces and become soil through erosion. The soil is then moved by wind or water. |
| **FOSSIL** | Ancient remains of plants or animals preserved in rock. Fossils are usually found in sedimentary rock. |
| **FOSSILIFEROUS LIMESTONE** | Sedimentary rock that has fossil shells that were not destroyed by erosion or weathering before the sediment became rock. |
| **GNEISS** | (pronounced *nice*) Metamorphic rock from granite underwent heat and pressure. The minerals are layered as they solidified at different temperatures, resulting in light bands of quartz and feldspar alternating with dark bands of mica. |
| **GRANITE** | An igneous rock composed of feldspar, quartz and mica. The crystals are large and easy to differentiate because the minerals cooled slowly deep in the Earth, allowing time for the crystals to grow. |
| **IGNEOUS ROCKS** | Rocks that cool and harden (solidify) from a molten (liquid) state. Large crystals such as those in granite, form during slow cooling. Small crystals, such as basalt, form when fast cooling occurs. When molten material is thrown from a volcano, very rapid cooling occurs, resulting in microscopic crystals or no crystal formation, such as obsidian and pumice. |
| **LAVA** | Molten material expelled from volcanoes that flow on the Earth’s surface. |
| **LIMESTONE** | A sedimentary rock that forms when shallow seas evaporate, leaving behind deposits of shells or shell pieces. It dissolves in acid, releasing carbon dioxide. |
| **LUSTER** | Refers to the shiny appearance of some rocks. |
| **MAGMA** | Molten rock under the Earth’s surface. (melted minerals) |

*ROCKS, EROSION, WEATHERING GLOSSARY*

|  |  |
| --- | --- |
| **MARBLE** | A metamorphic rock made form limestone or calcite that has been heated under pressure. |
| **METAMORPHIC ROCKS** | Rock formed when other rocks are subjected to heat and pressure. The metamorphic rock has some of the same characteristics as the rock it is made form, but it is harder. |
| **MINERALS** | Minerals are inorganic(neither plant nor animal) substances from the Earth. A mineral consists of 1 substance only. |
| **MOLTEN** | Minerals in liquid form due to extreme heat. |
| **OBSIDIAN** | An igneous rock. Natural glass that forms from volcanic eruptions, resulting in very rapid cooling. It appears black and glassy It breaks along curved surfaces, making sharp edges that were used to cut tools and arrowheads. |
| **ORE** | A mineral or aggregate of minerals from which a valuable constituent especially a metal, can be profitably mined or extracted. (copper, gold, silver) |
| **PUMICE** | An igneous rock that is formed during volcanic eruptions when molten rock is thrown into the air and cooled before it reaches the ground. Gases escape during this very rapidly cooling, leaving numerous air holes and bubbles of trapped gas inside. It is usually lighter (less dense) than water and floats. |
| **ROCK** | A rock is made of one or more minerals. Two varieties of the same rock may appear different because of the different proportions of the minerals. |
| **ROCK SALT (HALITE)** | A sedimentary rock made of salt crystals that grew when water evaporated. |
| **SANDSTONE** | A sedimentary rock made of compressed sand. |
| **SCORIA** | An igneous rock composed of the upper layer of basalt that cools rapidly and is full of gases. These gases escape during cooling, leaving holes. The basalt below is crushed under the weight of the scoria and is dense. Sometimes it is red because it contains iron. Scoria is heavier (more dense) than pumice. |
| **SEDIMENTARY** | Rocks that form from debris that settles in lakes, streams, or oceans and is squeezed into rock after millions of years by the pressure of the water. They differ based on the materials from which they were formed. Most fossils are found in sedimentary rock. |
| **SHALE** | A sedimentary rock composed of clay and minerals. It is soft and flat and shows layering of mud. |
| **SLATE** | Metamorphic rock that formed from shale. It is thinner, shinier, and harder than shale and was used for blackboards by the American pioneers. |
| **STREAK TEST** | Some soft rocks can be identified by the color of the mark they make when drawn across a hard surface. |