

Introductory Glossary

(Disclaimer - some rocks have more than one chemical formula we are presenting only one for each rock sample)

Abrasion - Rubbing, scratching and scraping of a rock surface

Acid Rain - Rain water that can dissolve minerals out of a rock

Andesite - Volcanic rock that hardens at a medium rate

Basalt - Quickly cooled volcanic rock

Biological Activity - Plants and animals breaking rocks into smaller pieces

Catalysts - Chemical solutions that speeds up or slows down a chemical change without being changed or used up in the reaction.

Cementing - Pieces of rock, sand and dirt are held together with natural glue

Chemical Activity - Hot chemically rich water that help in the making of metamorphic rock.

Chemical Weathering - Minerals that are dissolved out of rocks and cause the rock to fall apart.

Chert - Quartz made of microscopic crystals

Coarse Grained - Large sized crystals

Compaction - Squeezing together of layers of pebbles, dirt and sand.

Conglomerate - Rock made of pieces of pebbles glued together

Contact Metamorphism - Metamorphic rocks formed near magma pools

Cooling - Lowering the temperature of the minerals in lava

Crystalization - Hardening of melted rock into a solid

Crystals - Special shapes that atoms form inside rocks and minerals

Extrusive - Formed on or above the surface of the earth

This project is made possible by a Faculty Innovation Grant from Seton Hall University. Please contact Martha Schoene at schoenma@shu.edu with any questions.

Fault Zone Metamorphism - Changes in shape and structure of rocks deep earthquake zones

Fine Grained - Tiny crystals

Foliated - Minerals in stripe, bands, ribbons or obvious layers

Frost Wedging - A series of freezing and thawing events that can cause an object to break into pieces.

Gabbro - Slow cooled volcanic rock

Gneiss - Granite that has been heated and squeezed so the minerals form stripes.

Granite - Slow cooled volcanic rock

Graywacke - Grey sandstone

Heat - Raising of the temperature to reshape the crystals in a rock

Hornfels - Sedimentary rock that has been heated and squeezed

Hydrothermal Solutions - Hot watery solutions

Igneous - Volcanic rocks formed by the cooling of melted rock

Intrusive - Formed under the surface of the earth

Lava - Melted rock on the surface of the earth- extrusive

Limestone - Rock made by seashells and minerals in sea water

Litification - Turning pebbles, dirt or sand into solid rock

Magma - Melted rock that is under the Earth's crust

Marble - Heated and squeezed limestone

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Mechanical Weathering - Big rocks breaking apart into smaller rocks.

Medium Grained - Containing crystals the size of a grain of sand to the size of a grain of rice.

Melting - Minerals in the rock change from a solid to a liquid.

Metamorphic Rock - Already formed rocks that change shape and structure due to heat and pressure.

Mudstone - Dirt squeezed together to make a rock.

Obsidian - Instantly cooled volcanic rock

Oxidation - Making rust

Peridotite - Slow cooled dark colored volcanic rock

Pressure - Squeezing rock together

Pumice - Rough glassy hole filled volcanic rock

Quartz - SiO_2 - A mineral found in igneous, sedimentary and metamorphic rocks. It can come in clear as well as a wide range of colors and is used in the making of glass, computer chips and as a gemstone; Quartz has a hardness of 7 and can scratch glass.

Quartzite - Sandstone that has been heated and squeezed

Regional-Metamorphism - Metamorphic rock formed inside of mountains

Rhyolite - Rapidly cooled volcanic rock

Rock Cycle - A dynamic model that explains the interrelationships of how igneous, sedimentary and metamorphic rocks are formed.

Root Pry - Tree roots that grow through rocks

Sandstone - Rock made of pieces of sand cemented together

Schist - Shale that has been heated and squeezed so the minerals form stripes

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Scoria - Quickly cooled hole filled volcanic rock

Sediments - Pieces of rock, dirt and sand

Sedimentary Rocks - Rocks made from pieces of other rocks.

Selenite - Clear crystals of gypsum

Shale - Rock made of clay and sand

Slate - Heated and squeezed shale

Solidification - Hardening of melted rock.

Tektites - Glass formed from high speed impact of a meteorite

Unconsolidated - Not held together. Separate. Free to move as individual pieces

Unloading- A weathering process that involves the lessening of pressure on confined rock, causes sheets to break off. Most commonly due to erosion of the exposed layers of granite mountains but also a danger in underground mines or tunnels.

Volcanic Breccia - Volcanic rock made of rock pieces held together by volcanic glass.

Volcanic glass - Melted rock that cools too rapidly to form crystals