Rocks & Minerals Vocabulary

Acid test – hydrochloric acid will bubble with calcite or limestone.

Adjacent - next to / near

Banding – a structure in a metamorphic rock of nearly parallel bands of different textures or minerals.

Bioclastic (sedimentary rock) – any rock made by living organisms or composed mostly of materials from life forms. Also called organic sedimentary rock.

Cementation – the solidification of sediments by the deposition of dissolved minerals in the tiny spaces between the sedimentary particles.

Chemical (sedimentary rock) – sedimentary rock consisting of material that was precipitated from water by either organic or inorganic means.

Clastic (sedimentary rock) – a sedimentary rock made of broken fragments of preexisting rock.

Cleavage – the tendency of a mineral to break along flat planes of weak bonding.

Compaction – the process by which sediments are squeezed together by the weight of overlying materials driving out water.

Contact Metamorphism – changes in rock caused by the heat of a nearby magma body.

Crystal structure – the pattern or arrangement of atoms that characterizes each mineral; also called atomic structure.

Deposition – the process by which an agent of erosion loses energy and drops the sediment it is carrying.

Distorted (structure) – the curving and folding of the foliations (mineral layers) in metamorphic rock caused by heat and pressure.

Element – a substance that cannot be broken down into simpler substances by ordinary chemical or physical means.

Extrusive (igneous rock) – igneous rock that has formed on Earth's surface.

Felsic – rocks that are rich in the minerals feldspar and silica (quartz).

Foliation – texture of metamorphic rocks caused by the layering of mineral crystals.

Fossil – the remains or traces of an organism preserved from the geologic past.

Fracture – the tendency of a mineral to break unevenly; not along any particular plane.

Glassy (also called vitreous) – a nonmetallic type of luster in minerals which gives a substance a glazed appearance, like glass or porcelain.

Grain size – the size of mineral particles in igneous rock. Also the size of rock particles in clastic sedimentary rocks.

Hardness – a minerals resistance to being scratched.

Heat and Pressure – geologic processes that can help change rock.

Hydrochloric acid – type of acid frequently used to test chemical properties of minerals and rocks.

Igneous (rock) – a rock formed by the crystallization of molten magma.

Inorganic – nonliving and not made from a living thing.

Intrusive (igneous rock) – igneous rock that has formed below Earth's surface.

Land derived – sediments eroded from land.

Lava – magma that reaches Earth's surface.

Luster – the appearance or quality of light reflected from the surface of a mineral.

Mafic – rocks rich in minerals containing iron and magnesium.

Magma – a body of molten rock found at depth, including any dissolved gases and crystals.

Melting – the process by which a solid is changed to a liquid, usually with the addition of heat.

Metamorphic (rock) – rock formed by the alteration of preexisting rock deep within Earth (but still in the solid state) by heat, pressure, and/or chemically active fluids.

Mineral – a naturally occurring, inorganic crystalline material with a unique chemical composition.

Organic (sediments) – particles produced by the life activities of plants or animals.

Pluton – a rock structure formed by the solidification of magma inside the Earth.

Precipitation – a type of sediment deposition in which dissolved minerals come out of solution to form solids, as in the formation of chemical sedimentary rocks such as rock salt.

Regional Metamorphism – metamorphism associated with large-scale mountain building events.

Rock – a consolidated mixture of minerals.

Rock cycle – a model that illustrates the origin of the three basic rock types and the interrelatedness of Earth's materials and processes.

Sediment – loose particles created by the weathering and erosion of rock, by chemical precipitation from solution in water, or from the secretions of organisms and transported by water, wind, or glaciers.

Sedimentary (rock) – rock formed from the weathered products of preexisting rock that have been transported, deposited, compacted, and cemented.

Specific gravity – the density of a mineral compared with the density of water.

Streak – the color of a mineral in powdered form.

Texture – the size, shape, and arrangement of mineral crystals or grains in a rock.

Uniformitarianism – the concept that processes that have shaped Earth in the past are essentially the same as those operating today.

Uplift – movement of rock from deep underground to the surface. Caused by tectonic forces.

Vesicular – a rock texture characterized by cavities formed by gas bubbles escaping from lava as it cools and solidifies.

Volcano - a vent in the earth's crust through which lava, steam, ashes, etc., are expelled, either continuously or at irregular intervals.