

FOSS Soils, Rocks, and Landforms Module

Glossary

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abrasion the rubbing, grinding, and bumping of rocks that cause physical weathering (SRB, IG)

acid a substance that geologists use to identify rocks that contain calcite (SRB)

acid rain a form of precipitation containing acid, which forms when carbon dioxide gas in the air dissolves in water droplets; a form of chemical weathering (IG)

aggregate a mass of rock particles, such as pebbles, gravel, and sand (IG)

alluvial fan a fan-shaped deposit of rocks formed where a stream flows from a steep slope onto flatter land (IG)

basalt a dark rock formed from cooling lava (IG)

bauxite an ore that has aluminum in it (SRB)

birthstone a gem mineral that is identified with a month of the year (SRB)

break to smash or split into pieces (IG)

calcite a common rock-forming mineral in Earth's crust (SRB, IG)

canyon a V-shaped gorge with steep sides eroded by a stream (IG)

cement a fine gray powder made from limestone; component of concrete (IG)

chemical reaction a process in which two or more materials mix in a way that forms new materials (IG)

chemical weathering the process by which the minerals in a rock can change due to chemicals in water and air. Chemical weathering can cause rocks to break apart. (SRB, IG)

clay the smallest category of rock pieces; component of soil (IG)

cleavage the flat surfaces of freshly broken minerals (SRB, IG)

concrete a mixture of gravel, sand, cement, and water (SRB, IG)

conglomerate a rock composed of smaller pieces like clay, silt, sand, gravel, and pebbles (IG)

core the center of Earth, made mostly of iron and nickel (SRB)

crust Earth's outer layer of solid rock (SRB, IG)

decay when dead plants or animals break down into small pieces (SRB)

delta a fan-shaped deposit of earth materials at the mouth of a stream (IG)

deposition the settling of sediments (SRB, IG)

dissolve when a material mixes uniformly into another (SRB)

earth material any natural resource that makes up Earth, including soil and water (SRB, IG)

earthquake a sudden movement of Earth's crust along a fault (SRB, IG)

erosion the carrying away of weathered earth materials by water, wind, or ice (SRB, IG)

expand when the volume of a substance increases or gets bigger (IG)

fault a break in Earth's crust along which blocks of rock move past each other (SRB)

feldspar a common rock-forming mineral in Earth's crust (SRB, IG)

flood a large amount of water flowing over land that is usually dry (SRB, IG)

floodplain land covered by water during a flood. Small particles, like sand and silt, are deposited on a floodplain (IG)

fluorite a mineral that comes in a variety of colors, can be scratched with a paper clip, and glows under an ultraviolet light source (IG)

fossil any remains, trace, or imprint of animal or plant life preserved in Earth's crust (SRB, IG)

fossil fuel plants and animals that became buried under sediments millions of years ago, then slowly transformed into deposits of carbon-rich substances, such as coal, petroleum, and natural gas (IG)

fracture the uneven, rounded, or splintered surfaces of some minerals when they break (SRB, IG)

freeze to become hard or stiffened due to loss of heat (IG)

galena an ore mineral for lead and silver that has a metallic luster and is heavy for its size (IG)

gem a hard mineral that can be cut into beautiful shapes (SRB)

geologist a scientist who studies Earth, its materials, and its history (SRB)

geoscientist a scientist who studies the use, distribution, and conservation of Earth's natural resources (SRB)

geothermal power alternative energy source that comes from the internal heat of the earth (IG)

glacier a large mass of ice moving slowly over land (SRB)

gold a valuable dense metal that is found in ore and nuggets (SRB)

granite an igneous rock that forms inside Earth (SRB, IG)

gravel rocks that are smaller than pebbles but bigger than sand; component of soil (IG)

gypsum a mineral that forms rosettes or fibers, can be scratched with a fingernail, and is used to make plaster (IG)

hardness a property of minerals determined by resistance to scratching (SRB, IG)

hematite an iron ore mineral that has a metallic luster and leaves a reddish-brown streak (IG)

hornblende a mineral that is a component of granite that has long crystals with parallel sides (IG)

humus (HEW-mus) bits of dead plant and animal parts in the soil (SRB, IG)

igneous rock a rock that forms when melted rock (magma) hardens (SRB, IG)

landform a feature of the land, such as a mountain, canyon, or beach (SRB, IG)

landslide the sudden movement of earth materials down a slope (SRB, IG)

lava melted rock erupting onto Earth's surface, usually from a volcano (SRB, IG)

limestone a sedimentary rock made mostly of calcite (SRB, IG)

luster a description of the way light reflects off the surface of a mineral (SRB, IG)

magma melted rock below Earth's surface (SRB, IG)

magnetic a property of minerals that are attracted to magnets (SRB)

magnetism a property of certain kinds of materials that causes them to attract iron or steel (IG)

magnetite a mineral that contains iron and sticks to magnets (IG)

mantle the solid rock material between Earth's core and crust (SRB, IG)

marble a metamorphic rock formed when limestone is subjected to heat and pressure (SRB, IG)

meander a curve or loop in a river or stream (IG)

metallic describing the luster of a mineral that shines like metal (SRB, IG)

metamorphic rock a rock that forms when rocks and minerals are subjected to heat and pressure (SRB, IG)

mica a mineral that pulls apart in thin, flexible sheets and is one of the components of granite (IG)

mineral ingredient of a rock (SRB, IG)

model a representation of the features and actions of a natural system or process (IG)

Mohs' scale a numerical scale used by geologists to rank minerals according to their hardness, with 10 being the hardest mineral (diamond), and 1 being the softest mineral (talc) (IG)

mountain a high, steeply sloped area where rock is uplifted along a fault or created by a volcano (IG)

natural resource a material such as soil or water that comes from the natural environment (SRB, IG)

nonmetallic describing the luster of a mineral that does not shine like a metal (SRB, IG)

nonrenewable resource a resource that is not replenished because it takes extended geological periods to form, such as rocks, minerals, and fossil fuels (IG)

nutrient something that living things need to grow and stay healthy (SRB)

opaque describing matter that does not let light shine through it (SRB)

ore a rock or mineral that has a valuable substance in it, such as gold (SRB)

ore mineral a mineral from which a valuable material, usually a metal, is extracted (SRB)

particle a very small piece or part (SRB)

pebble the largest category of rock pieces; component of soil (IG)

physical weathering the process by which rocks are broken down by breaking and banging (SRB, IG)

property something that you can observe about an object or a material. Size, color, shape, texture, and smell are properties. (SRB)

pumice a type of rock that forms when lava erupts from volcanoes (SRB)

pyrite a yellow mineral with a metallic luster; also known as fool's gold (IG)

quartz a common mineral in igneous rocks (SRB, IG)

react to act or change in response to something (SRB)

renewable resource a resource that is naturally replenished continuously and quickly, such as sunlight, water, and air (IG)

retain to hold or continue to hold (SRB)

river channel a river that flows deeper in the center and moves along a confined path (IG)

river mouth the area of a river where it flows into sea or lake (IG)

rock a solid earth material made of two or more minerals (SRB, IG)

rock cycle the processes by which rocks change into different kinds of rocks (SRB)

sand rocks that are smaller than gravel, but bigger than silt; component of soil (IG)

sandstone a sedimentary rock made of sand particles stuck together (SRB, IG)

scratch test method used to find out how hard a mineral is compared to other minerals (IG)

sediment pieces of weathered rock such as sand, deposited by wind, water, and ice (SRB, IG)

sedimentary rock a rock that forms when layers of sediments get stuck together (SRB, IG)

silt rocks that are smaller than sand, but bigger than clay (SRB, IG)

slope the angle of the land over which water flows (IG)

soil a mix of humus, sand, silt, clay, gravel, and/or pebbles (SRB, IG)

solar energy an alternative energy source from the sun that drives the water cycle and produces wind, ocean waves, and flowing water in rivers and streams (IG)

streak the mark left when a mineral sample is rubbed on a tile (SRB, IG)

transport to move or carry from one place to another (SRB)

valley a low area between mountains where a stream or glacier flows. Stream valleys are V-shaped. Glacier valleys are often U-shaped (IG)

volcano an opening in Earth's crust where lava, cinders, ash, and gases come to the surface (SRB, IG)

weathering the process by which larger rocks crack and break apart over time to form smaller rocks (SRB, IG)

wind power an alternative energy source that uses the power of the wind (IG)