

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)

basin a low area in which sediments are often deposited (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)

carnivore an animal that eats only animals (SRB)

cast a copy of an organism, like a fossil, that is created by the minerals in a mold (SRB, 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)

conclusion a scientific decision based on observations, evidence, and data (SRB)

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)

contour interval the change in elevation between any two contour lines (SRB, IG)

contour lines the curved lines in a topographic map that represent a specific elevation (SRB, 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)

digestive system the organs and structures that digest food. The digestive system includes the teeth, mouth, esophagus, stomach, small intestine, large intestine, and colon. (SRB)

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)

elevation vertical distance or height above sea level (IG)

engineer a scientist who designs ways to accomplish a goal or solve a problem (SRB)

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

evidence data used to support claims. Evidence is based on observations and scientific data. (SRB)

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)

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)

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)

fossil record all the fossils on Earth (SRB)

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

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

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)

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)

herbivore an animal that eats only plants or algae (SRB)

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)

imprint the outline of an organism left in sediment (IG)

index contour the numbers on contour lines that determine whether the elevation is rising or falling (SRB)

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)

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

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

mineral ingredient of a rock (SRB)

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

mold a space in the sediments that fills with minerals (SRB, 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)

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)

organism any living thing (SRB)

paleontologist a scientist who studies fossils (SRB)

particle a very small piece or part (SRB)

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

petrification the process by which an organism is turned to stone over a long period of time (IG)

petrified wood the fossil remains of trees. The term means “wood turned into stone.”

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

Portland cement a kind of cement made from limestone (SRB)

predator an animal that hunts and catches other animals for food (SRB)

preserved remains fossils (IG)

profile a side view or cross-section of a landform such as a mountain (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)

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)

restoration putting something back to its original condition, such as building a fossil skeleton (SRB)

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)

satellite cone the cone-shaped mound of volcanic material created by eruptions (IG)

sea level the average height of the ocean’s surface, zero elevation (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)

superposition the principle that rock layers and the fossils they contain are arranged in layers and that lower sedimentary layers are older than higher layers of rock (IG)

system two or more objects that work together in a meaningful way (IG)

topographic map a map that uses contour lines to show the shape and elevation of the land (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)