

Absolute age: the age of a rock given as the number of years since the rock formed

Absolute magnitude: the brightness of a star if it were a standard distance from Earth

Acid Rain: rain that is more acidic than normal, caused by the release of molecules of sulfur dioxide and nitrogen oxide into the air

Air Mass: a huge body of air that has similar temperature, pressure, and humidity

Alloy: a solid mixture of two or more metals

Aquifer: an underground layer of rock or soil that holds water

Artesian Well: a well in which water rises because of pressure within the well

Asteroids: objects revolving around the sun that are too small and too numerous to be considered planets

Astronomy: the study of the moon, stars, and other objects in space

Atmosphere: the mixture of gases that surrounds Earth the outermost of the four spheres into which scientists divide Earth

Atom: the smallest unit of an element that retains the properties of that element

Axis: an imaginary line that passes through Earth's center and the North and South Poles about which Earth rotates

Big Bang: the initial explosion that resulted in the formation and expansion of the universe

Biosphere: all living things, one of the four sphere into which scientists divide Earth

Black hole: the remains of an extremely massive star pulled into a small volume by the force of gravity

Cementation: the process by which dissolved minerals crystallize and glue particles together into one mass

Chemical weathering: the process that breaks down rock through chemical changes

Cirrus: wispy, feathery clouds made mostly of ice crystals that form at high levels, above about 6 kilometers

Climate: the average, year-after-year conditions of temperature, precipitation,

winds, and clouds in a particular area

Comet: a ball of ice and dust whose orbit is a long, narrow ellipse

Compound: a substance in which two or more elements are chemically joined

Condensation: the process by which a gas changes to a liquid

Conduction: the transfer of heat from one substance to another by direct contact of
of matter

Constellation: a pattern of stars in the sky

Continental Drift: the hypothesis that the continents are slowly moving across the
Earth's surface.

Convection: the transfer of heat by movement through a fluid

Convergent Boundary: a plate boundary where two plates move towards each other

Coriolis Effect: the way the Earth's rotation makes winds in the Northern Hemisphere
curve to the right and the winds in the Southern Hemisphere curve to
the left

Crystal: a solid in which the atoms are arranged in a pattern that repeats

Current: a large stream of moving water that flows through the ocean

Cyclone: a swirling center of low air pressure

Density: the amount of mass in a given space

Deposition: the process by which sediment settles out of the water or wind that is
carrying it, and is deposited in a new area

Dew Point: the temperature at which condensation begins

Divergent Boundary: a plate boundary where two plates move away from each
other

El Nino: an abnormal climate event over the Pacific Ocean, occurs every 2-7 years

Equinox: the two days of the year where neither Hemisphere is tilted toward nor
away from the sun

Era: one of the three long units of geological time between the Precambrian and

current

Erosion: the process by which water, ice, wind, or gravity moves fragments of rock and soil

Evaporation: the process by which molecules at the surface of a liquid absorb enough energy to transform into a gaseous state

Evolution: the process by which all kinds of living things have changed over time

Fault: a break or crack in the Earth's lithosphere along which rocks move

Fossil: the preserved remains of living things

Gas Giants: the name given the first four outer planets: Jupiter, Saturn., Uranus, Neptune

Geologic Time Scale: a record of the geological events and life forms in Earth's History

Greenhouse Effect: the process by which heat is trapped in the atmosphere by water vapor, carbon dioxide, methane, and other gases

Groundwater: water that fills the cracks and pores in underground soil and rock

Half-life: the time it takes for half of the atoms of a radioactive element to decay

Humidity: a measure of the amount of water vapor in the air

Hydrosphere: Earth's water and ice. One of the four spheres into which scientists divide Earth

Hypothesis: a possible explanation for a set of observations or answer to a scientific question

Igneous Rock: a type of rock that forms from the cooling of molten rock at or below the surface

Inference: an interpretation based on prior knowledge and observation

Inorganic: not formed from living things or the remains of living things

Intrusion: an igneous rock layer formed when magma cools below the surface

Invertebrate: an animal without a backbone

Jet Streams: bands of high speed winds about 10 Km above the surface of Earth

Latitude: the distance north or south of the equator, measured in degrees

Law of Superposition: the geologic principle that states that in horizontal rock layers of sedimentary rock, each layer is older than the layer above it and younger than the one below it

Light-year: the distance light travels in one year

Longitude: the distance east or west of the prime meridian, measured in degrees

Lunar Eclipse: the blocking of sunlight to the moon that occurs when the Earth is directly between the sun and the moon

Mantle: the layer of hot, solid material between Earth's crust and core

Mechanical Weathering: the type of weathering in which rock is physically broken down into smaller pieces

Metamorphic Rock: a type of rock that is changed by heat and pressure

Mineral: a naturally occurring, inorganic solid that has a crystal structure and a definite chemical structure

Nebula: a large amount of gas and dust in space, spread out in an immense volume

Neutron Star: a tiny star that remains after a supernova explosion

Ozone: a form of oxygen atom with three molecules of oxygen instead of two

Permeable: characteristic of materials such as gravel which allow water to flow through

Photosynthesis: the process by which plants turn carbon dioxide, water, and energy from the sun to make food

Plate Tectonics: the theory that pieces of the Earth's crust are in constant motion, driven by convection currents in the mantle

Precipitation: forms of water such as rain that fall from clouds to reach Earth

Radioactive Decay: the breakdown of a radioactive element, releasing particles of energy

Relative Age: the age of a rock compared to the ages of rock layers

Relative Humidity: the percentage of water vapor in the air compared to the total possible amount the air can hold at that temperature

Revolution: the movement of an object around another object

Rock Cycle: a series of processes on the surface and inside earth that slowly change rocks from one form to another

Satellite: any object that revolves around another object in space

Sea-floor Spreading: the process by which molten material adds new oceanic crust

Sedimentary Rock: a type of rock that forms when pieces of other rocks or remains of living things are pressed and cemented together

Soil Horizon: a layer of soil that differs in color and textures of the soil above or below it

Solar Eclipse: the blocking of sunlight to the Earth when the moon is directly between the Earth and sun

Solar Flare: an explosion of hydrogen gas from the Sun's surface that occurs when sunspot regions suddenly connect

Solar Wind: a stream of electronically charged particles produced by the sun's Corona

Solstice: the two days of the year when the day is as long as the night

Stratus: clouds that form in flat layers

Subduction: the process by which oceanic crust sinks beneath a deep-ocean trench and back into the mantle

Sunspots: dark, cooler regions on the surface of the sun

Supernova: the explosion of a dying giant or supergiant star

Terrestrial Planets: the name given to the four inner planets, Mercury, Venus, Earth, and Mars

Texture: the size, shape, and pattern of a rock's grains

Tides: the daily rise and fall of Earth's waters on shores

Topographic Map: a map that shows the surface features of an area

Transform Boundary: a plate boundary where two plates move past each other in opposite directions

Troposphere: the lowest layer of Earth's atmosphere, where weather occurs

Unconformity: a place where an old, eroded rock surface is in contact with a new rock layer

Water Cycle: the continuous process by which water moves from the Earth's surface to the atmosphere and back again

Weather: the condition of Earth's atmosphere at a particular time and place

Weathering: the chemical and physical process of rocks breaking down

Wind: the horizontal movement of air from an area of higher pressure to an area of lower pressure