

Washington State Science Vocabulary List

6th Grade -> **Population & Ecosystems** **Light & Energy** **Elements & Compounds**

All Grades -> **Science Investigations**

accelerate	Change in velocity over time. The rate at which something speeds up or slows down.
adaptation	Any change in the structure or functioning of an organism that is favored by natural selection and makes the organism better suited to its environment.
air	The mixture of gases in the Earth's atmosphere is commonly known as air. Earth's atmosphere is a layer of gases surrounding our planet that is retained by Earth's gravity. Dry air contains roughly 78% nitrogen, 21% oxygen, and 1% trace gases, primarily water vapor.
allele	One member of a pair or series of different forms of a gene.
anatomical feature:	A structure found in a living thing (e.g., heart, lung, liver, backbone).
analyze	To separate into separate parts or basic principles to determine the nature of the whole.
apply	The skill of selecting and using information in new situations or problems.
aqueous solution	A solution in which the solvent is water.
asexual reproduction	Involves the growth of a new organism by fission of cell nuclei. Asexual reproduction usually involves one parent and leads to offspring that are genetically identical to the parent and to one another.
asteroid	A small rocky body orbiting the Sun, sometimes called minor planet or planetoid.
atmosphere	A layer of gases that may surround the Earth and other material bodies of sufficient mass.
atom	A basic unit of matter consisting of a dense central nucleus surrounded by a cloud of negatively charged electrons.
atomic mass number	The total number of protons and neutrons in the nucleus of a single atom.
atomic number	The number of protons in the nucleus of an atom.
average acceleration	Change in velocity and/or direction with respect to time. Acceleration is a vector quantity, so both velocity and direction are required to define it.
average speed	The measure of distance that an object travels in a given time interval.
average velocity	Change in position and/or direction with respect to time. Velocity is a vector quantity, so both speed and direction are required to define it.
biodiversity	The different kinds of organisms in a specific ecosystem or on the planet as a whole.
biogeochemical cycle	A circuit or pathway by which a chemical element moves through both living and non-living components of an ecosystem, including the Earth as a whole.

biological classification	A method by which biologists group and categorize species of organisms. Biological classification is a form of scientific taxonomy.
boiling point	The temperature at which a liquid changes state and becomes a gas. The boiling point changes as pressure changes.
carbon cycle	The biogeochemical cycle that describes the transformations of carbon and carbon-containing compounds in nature.
cellular membrane	The biological membrane separating the interior of a cell from the outside environment. It is a semipermeable lip bilayer found in all cells.
cellular respiration	The process by which molecules are converted into useable energy in cells.
challenges	Problems that can be solved using science concepts and principles, inquiry, and the technological design process.
characteristic	A distinguishable trait, quality, or property.
chemical change	A chemical change occurs whenever compounds are formed or decomposed. During this type of reaction, there is a rearrangement of atoms that makes or breaks chemical bonds.
chemical properties	Any of a material's properties, such as color, pH, or ability to react with other chemicals, that becomes evident during a chemical reaction.
chemical reaction	A process that results in the conversion of chemical substances (reactants) to other substances (products). Products generally have different chemical properties from the reactants.
chloroplast	An organelle found only in plants and photosynthetic protists; contains chlorophyll, which absorbs the light energy use to drive photosynthesis.
chromosome	An organized structure of DNA and supporting regulatory proteins found in cells. Chromosomes contain many genes.
claim	A proposition based on evidence and logical argument.
classify	To arrange in some sort of order by categories or groupings.
climate	Encompasses the temperatures, humidity, atmospheric pressure, winds, rainfall, atmospheric particle count and numerous other meteorological elements in a given region over long periods of time.
closed system	A system in which matter may circulate, but may not enter or leave.
comet	A small Solar System body that orbits the Sun and, when close enough to the Sun, exhibits a visible coma (atmosphere) and/or a tail made of gas and/or dust.
common	Refers to materials and processes that most students have experienced.
common ancestors	A group of organisms is said to have common descent if they have a common ancestor. In modern biology, it is generally accepted that all living organisms on Earth are descended from a common ancestor or ancestral gene pool.
communicate	Participate in the discourse of science. Communication includes but is not limited to discussions, journaling, and sharing the results of investigations effectively and clearly in both written and oral forms.

compare	To examine two or more objects or events to establish similarities and differences.
comparison	An examination of two or more objects or events to establish similarities and differences.
compound	A substance consisting of two or more different elements chemically bonded together in a fixed proportion by mass that can be split up into simpler substances through a chemical reaction.
concept	An abstract, universal idea of phenomena or relationships among phenomena.
conclusion	A statement of the findings of an investigative process that is supported by investigative evidence (data) and links to the current body of scientific knowledge.
condensation	The change of the physical state of matter from a gas to a liquid.
conduction	The transfer of heat energy through matter by kinetic energy from particle to particle with no net displacement of the particles.
confidence	Assurance that the conclusions of an investigation are reliable and valid.
conservation	To preserve. In physics the Conservation Laws specify quantities that are preserved during transformations.
Conservation of Energy	A physical law stating that the total amount of energy in an isolated system remains constant. Also stated as: energy cannot be created or destroyed—only changed from one form to another.
Conservation of Mass	A physical law stating that the total amount of mass in a closed system remains constant. Also stated as: mass can be neither created nor destroyed during a chemical reaction—only rearranged.
consider	Sustained purposeful concentration and attention to details in an attempt to reach the truth or arrive at a decision about the validity of evidence or a claim.
constellation	A group of stars that appear to form a visible figure or picture as viewed by people in a particular culture.
constraint	The limitations imposed on possible solutions to problems or challenges. Constraints are often expressed in terms of available money, materials, or time.
consumer	An organism that gets its chemical energy for growth and development from other organisms. Animals in a food web are consumers that obtain food energy by eating other animals or plants.
contrast	To examine two or more objects or events to establish differences.
control	A standard condition that other conditions can be compared to in a scientific experiment.
controlled experiment	A laboratory investigation in which the values of all variables are kept the same except for one that is changed from trial to trial (manipulated or independent variable) and one that is measured (responding or dependent variable).
controlled variable	The conditions that are kept the same from trial to trial in a laboratory investigation.
convection	The physical movement of molecules within fluids (e.g. liquids, and gases). Convection is one of the major modes of heat transfer and mass transfer.

core	Used literally, core refers to whatever is in the center of an object, as the core of an apple, or Earth's core. Used metaphorically, core refers to what is most important, as in —core content.
Core of the Earth	Earth's core is most likely a solid sphere about 1,220 km in radius. It is believed to consist of an iron-nickel alloy, and is likely surrounded by a liquid outer core, extending to about 3,400 km from the center of our planet.
correlation	A known relationship between two variables in which it is not possible to infer whether or not a change in one variable caused a change in the other variable.
covalent bond	A form of chemical bond characterized by sharing of pairs of electrons between atoms, or between atoms and other covalent bonds.
criteria	A standard on which to judge success (plural form: criteria).
critique	A critical review of a specific topic, process or investigation.
crust	Earth's outermost shell that is composed of a variety of igneous, metamorphic, and sedimentary rocks. Earth's crust includes the oceanic crust, about 7-10 km thick, and the continental crust, about 35-40 km thick.
crustal plate	The outermost part of the Earth's interior mantle contains the lithosphere which is divided into eight major tectonic or crustal plates that float on the asthenosphere and move in relation to one another.
culture	Refers to patterns of human activity and the symbolic structures that give such activities significance and importance within a society.
decompose	To break down tissue of a formerly living organism into simpler forms of matter.
decomposers	Organisms that consume the remains of dead organisms and, in doing so, break down the tissues into simpler forms of matter that can be used as nutrients for other living organisms.
dehydration synthesis	A chemical reaction in which two molecules or functional groups combine to form one single molecule, with the accompanying loss of a small molecule. When this small molecule is water, it is known as a dehydration synthesis.
density	Mass per unit volume.
dependent variable	The factor of a system being investigated that changes in response to the manipulated (independent) variable and is measured.
deposition of sediments	Refers to the geologic process following erosion, in which particles of sand or soil are no longer transported from their source by wind or water and are added to a new landform.
describe	The skill of developing a detailed picture, image, or characterization using diagrams and/or words, written or oral.
design: (Verb)	The process of originating and developing a plan for a product, structure, system, or component to meet a human need or want.
design: (Noun)	Either the final plan (proposal, drawing, or model) or the result of implementing that plan in the form of the final product of a design process.
designed world	Systems or subsystems of the natural world built entirely or in part by people. Also called the constructed world.

discriminate	The skill of distinguishing accurately between and among pieces of evidence.
diversity	Wide variety. Species diversity refers to the abundance of different species within an ecosystem.
DNA	Large molecules inside the nucleus of living cells that carry genetic information. The scientific name for DNA is deoxyribonucleic acid.
dwarf planet	A body gravitationally bound to the Sun with sufficient mass to be approximately spherical in shape, but not enough mass to have pulled in debris from the neighborhood of their orbit. Plutoids are dwarf planets that orbit further from the Sun than Neptune.
effect	The result or consequence of an action, influence, or causal agent.
eclipse	An astronomical event that occurs when one celestial object moves into the shadow of another. The term eclipse is most often used to describe either a solar eclipse, when the Moon's shadow crosses Earth's surface, or a lunar eclipse, when the Moon moves into the shadow of Earth.
ecosystem	A natural unit consisting of all plants, animals, and microorganisms (biotic factors) in an area functioning together with all of the nonliving physical (abiotic) factors of the environment.
electric circuit	An interconnection of electrical elements such as resistors, inductors, capacitors, transmission lines, voltage sources, current sources, and switches that has a closed loop, giving a return path for the current.
electromagnetic force	One of the four known fundamental forces in the universe; includes the forces between charged particles and between molecules and ions.
electromagnetic waves	A self-propagating wave that includes visible light, radio waves, microwaves, infrared radiation, ultraviolet radiation, X-rays, and gamma rays. EM radiation is composed of an oscillating electric and magnetic field that move through empty space or transparent matter.
electromagnetic spectrum	The array of electromagnetic waves, from the shortest and most energetic gamma rays to the longest radio waves. The visible light spectrum is a small part of the middle range of the electromagnetic spectrum.
electron	An elementary subatomic particle that carries a negative electrical charge.
element	A pure chemical substance composed of all atoms that have the same number of protons.
empirical	Based on actual measurements, observations, or experience rather than on theory.
energy	The amount of work that can be done by a force.
energy transfer	The movement of energy from one location to another.
energy transformation	Change of energy from one form to another.
environment	Natural surroundings, including living and nonliving components. May also refer to a region or to all natural systems on planet Earth.
enzyme	Biological molecules that catalyze (increase the rates of) chemical reactions. Almost all enzymes are proteins.
equilibrium	The condition of a system in which competing influences are balanced.

erosion	The carrying away or displacement of solids (sediment, soil, rock and other particles), usually by wind, water, or ice by down-slope movement in response to gravity, or by living organisms.
error	Mistakes of perception, measurement, or process during an investigation; an incorrect result or discrepancy.
established	A proven or demonstrated inference or theory.
evaluate	To make judgments or appraisals based on collected data.
evaporation	The change in state of a substance from liquid to gas.
evidence	Observations, measurements, or data collected through established and recognized scientific processes.
evolution	A series of gradual or rapid changes, some regular, some random, that account for the present form and function of phenomena both living and nonliving.
examine	To use a scientific method of observation to explore, test, or inquire about a theory, hypothesis, inference, or conclusion.
experiment	An investigation under which the conditions for a phenomenon to occur are arranged beforehand by the investigator.
explain	To apply scientific ideas to describe the cause of a phenomenon or relationship, and/or to render a complex idea plain.
explain how	The skill of making a process plain and comprehensible, possibly including supporting details with an example.
explain that	The skill of making plain and comprehensible a theory, hypothesis, inference, or conclusion, possibly including supporting details with an example.
extinction	The death of all members of a species of plant or animal. The moment of extinction is generally considered to be the death of the last individual of that species, although the capacity to breed and recover may have been lost before this point.
factor	Agent or condition that could cause a change.
fault	In geology a fault, or fault line, is a rock fracture that shows evidence of relative Earth movement. Some faults may extend hundreds or even thousands of kilometers.
feedback	The process by which the output of a system is used to make changes in the operation of the system. Feedback can be negative, which reduces the disturbance to a system, or positive, which tends to increase the disturbance to a system.
fertilization	The union of an egg nucleus and a sperm nucleus.
field studies	The scientific study of free-living plants or animals in which the subjects are observed in their natural habitat without changing, harming, or materially altering the setting or subjects of the investigation.
fission	Splitting in half. Nuclear fission refers to the process by which the nucleus of a large atom is split into two smaller atomic nuclei.

food web	The complex eating relationships among species within an ecosystem. In a diagram of a food web organisms are connected to the organisms they consume by arrows representing the direction of energy transfer.
force	A push or pull. In physics, it is whatever can cause an object with mass to accelerate. Force has both magnitude and direction, making it a vector quantity.
form	The shape, appearance, or configuration of an object or organism.
fossil	The preserved remains or traces of animals, plants, and other organisms from the remote past.
fossil fuel	A substance that can be burned for heat energy, such as coal, oil, or natural gas, formed from the decayed remains of prehistoric animals and plants.
frictional force	The force resisting the relative motion of two surfaces in contact or a surface in contact with a fluid (e.g., air on an aircraft or water in a pipe). Also referred to as —friction.
function	The normal and specific contribution of a bodily or cellular part to the economy of a living organism.
fusion	Combining two or more distinct things. Nuclear fusion refers to the process by which multiple nuclei join together to form a heavier nucleus.
gas	A state of matter consisting of a collection of particles (molecules, atoms, ions, electrons, etc.) without a definite shape or volume that are in more or less random motion.
gene	A segment of inheritance information that, taken as a whole, specifies a trait. In common language the term gene sometimes refers to the scientific concept of an allele.
genetic	Inherited or affected by genes.
genetic information	A set of instructions coded in DNA molecules that specifies the traits of an organism.
genetic variation	A measure of the tendency of individual genotypes in a population to vary from one to another.
genetic recombination	The regrouping of genes in an offspring caused by the crossing over of chromosomes during meiosis.
generate	To produce.
generation	A generation is defined as the average interval of time between the birth of parents and the birth of their offspring.
global climate	The average temperature, humidity, rainfall, and other meteorological measures of Earth as a whole over a long period of time (usually taken to be about 30 years).
gravitational potential energy	Energy associated with gravitational force. Factors that affect an object's gravitational potential energy are its height relative to some reference point, its mass, and the strength of the gravitational field.
gravity	The force by which any two masses are attracted to one another. The term is sometimes used to refer to Earth's gravity.
habitat	An ecological or environmental area that is inhabited by a particular species. It is the natural environment in which an organism lives or the physical environment that surrounds (influences and is used by) a species population.

heat	A form of kinetic energy produced by the motion of atoms and molecules. Also known as thermal energy, heat may be transferred from one body or system to another due to a difference in temperature.
heredity	The passing of traits to offspring. This is the process by which an offspring cell or organism acquires the characteristics of its parent cell or organism.
human-made or man-made	The designed or modified environment (also called the built environment) created by people to meet their needs. The term also describes the interdisciplinary field concerned with the design, management, and use of the human-made environment.
human problems	Difficulties for individuals or populations that call for a solution.
hypothesis	A testable explanation for a specific problem or question based on what has already been learned. A hypothesis may be stated in an —if-then format that predicts a causal relationship or correlation between two variables.
idea	A general perception, thought, or concept.
igneous rock	Rocks formed when molten magma cools. Igneous rocks are divided into two main categories: Plutonic rocks result when magma cools and crystallizes slowly within the Earth's crust (e.g., granite), while volcanic rocks result from magma reaching the surface either as lava or fragments that are ejected into the air (e.g., pumice and basalt).
index fossil	Fossil that is used to determine relative age of layer of sedimentary rock.
infer	To arrive at a decision or logical conclusion by reasoning from evidence.
inference	A logical conclusion based on evidence.
information explosion	The rapid expansion of knowledge of the natural world, in part brought about by new knowledge and new technologies into the scientific, technological, and communication enterprises.
information technology	The branch of technology devoted to the acquisition, processing, storage, retrieval, and application of data. The term also applies to the hardware (e.g., computers and cell phones) and software developed to utilize data.
independent (manipulated) variable	The factor of a system being investigated that is changed to determine that factor's relationship to the dependent (responding) variable.
interpret	To present an explanation of an event or process.
ion	An atom or molecule that has lost or gained one or more electrons, giving it a positive or negative electrical charge.
ionic bond	A type of chemical bond that often forms between metal and nonmetal ions through electrostatic attraction.
ionic array	A formation of atoms held together by ionic bonds. Crystals of sodium chloride (salt), for example, does not form molecules. Rather, ions of sodium (Na) and chlorine (Cl) are held together by ionic bonds in a three-dimensional ionic array.
input	The addition of matter, energy, or information to a system.
inquiry	The diverse ways in which people study the natural world and propose explanations based on evidence derived from their work.

insulator	A material that is a poor conductor of energy such as electricity or heat.
integrity	A state of honesty; freedom from corrupting influence, motive, or bias in the collection and interpretation of data and observations.
interactions	The mutual influences among variables in a system or between subsystems, which may be correlational or causal.
interpretation	Inferences drawn from data collected during a scientific investigation.
intrinsic	A property of something or action which is essential and specific to that thing or action, and which is wholly independent of any other object, action or consequence.
investigate	To plan and conduct an organized scientific study to answer a question.
investigation	A multifaceted, organized scientific study of the natural world. Investigations may include such activities as making systematic observations; asking questions; gathering information through planned study in the field, laboratory, or research setting; analyzing data to find patterns; summarizing results, drawing conclusions, and communicating findings both orally and in writing.
isotope	Isotopes are differing forms of the same element that have nuclei with the same number of protons (the same atomic number) but different numbers of neutrons. Therefore, isotopes have different mass numbers.
kinetic energy	Energy of motion.
law	An observed regularity of the natural world that scientists have observed repeatedly. Natural Laws can be used to accurately predict what will happen in many situations.
liquid	A fluid that takes the shape of the part of the container that it occupies, and that forms a distinct surface.
life cycle	A description of the stages of development of an organism or planetary object such as a star.
logical plan	A series of steps thoughtfully designed to meet a clear goal.
logical argument	A set of one or more premises supported by evidence that leads to a clear conclusion.
magnifier	A convex lens which is used to produce an enlarged image of an object.
manipulated (independent) variable	The factor of a system being investigated that is changed to determine that factor's relationship to the dependent (responding) variable.
mantle	Earth's mantle is a viscous layer between the crust and the outer core. Earth's mantle is about 2,900 km thick and makes up about 70% of Earth's volume.
mass	A measure of how much matter there is in an object.
matter	Anything that has mass and that takes up space.
mechanical mixing	Physical rearrangement of fluids or small particles by continuous movement.
meiosis	A process of cell division that produces reproductive cells known as gametes. Each gamete contains only one set of the unpaired chromosomes and half as much genetic information as the original cell.

melting point	The temperature at which a solid melts and becomes a liquid.
Mendelian Genetics	Fundamental concept of heredity that each organism has characteristics that are encoded in its genes and passed on from one generation to the next.
metamorphic rock	Rocks modified by temperatures and pressures that are high enough to change the original minerals into other mineral types or into other forms of the same minerals.
mitochondria	The organelle in eukaryotic cells that carry on cellular respiration, release energy from food molecules and storing it in ATP.
mitosis	The production of two identical nuclei in one cell usually followed by cell division and the production of two cells with the same genetic makeup as the original cell.
model	A simplified representation of a system. Models are useful for studying systems that are too big, too small, or too dangerous to study directly.
molecule	A stable unit of two or more atoms held together by chemical bonds.
moons	A natural satellite or moon is a celestial body that orbits a planet or smaller planetary body.
motion	A constant change in the location of a body.
mixture	A substance made by combining two or more different materials without a chemical reaction occurring (the objects do not bond together).
mutation	Change to the nucleotide sequence of the genetic material of an organism.
natural selection	The process by which heritable traits that are favored by environmental conditions become more common in successive generations, and heritable traits that are less favored by environmental conditions become less common. Over time, this process may result in the emergence of new species.
natural world	Living and non-living aspects of the physical universe.
neutron	A subatomic particle with no net electric charge and a mass slightly larger than that of a proton.
niche	The position of a species or population in its ecosystem. A shorthand definition of niche is how and where an organism makes a living.
nitrogen cycle	The biogeochemical cycle that describes the transformations of nitrogen and nitrogen-containing compounds in nature.
nucleus	In physics: the central structure in an atom that contains neutrons and protons. In biology: the central structure in a living cell enclosed in a membrane that includes most of the genetic information in the cell.
nutrients	A food or chemicals that an organism needs to live and grow, or a substance used in an organism's metabolism that must be taken in from its environment.
observation	The skill of recognizing and noting some fact or occurrence in the natural world. Observation includes the act of measuring.
open-ended explorations	Initial investigations of interesting phenomena without prior hypotheses about what may be discovered, or even what variables may be most important to observe and measure.

open system	A system in which matter may flow in and out, as opposed to a closed system in which matter may not flow in or out.
orbit	The gravitationally curved path of one object around a point or another body, such as the orbit of a planet around a star.
organism	A living thing such as an animal, plant, fungus, or microorganism. In at least some form, all organisms are capable of reacting to stimuli, reproduction, growth and maintenance as a stable whole.
output	Matter, energy, or information that flows out of a system.
patterns	Recurring events or objects that repeat in a predictable manner.
phases of the Moon	Refers to the appearance of the illuminated portion of the Moon as seen by an observer, usually on Earth.
phenomena	Events or objects occurring in the natural world.
photosynthesis	A metabolic pathway that converts light energy into chemical energy. Its initial substrates are carbon dioxide and water; the energy source is sunlight (electromagnetic radiation); and the end products are oxygen and (energy-containing) carbohydrates, such as sucrose, glucose or starch.
physical change	Any change not involving modification of a substance's chemical identity, such as a change of state from solid to liquid, or liquid to gas.
plutoid	A dwarf planet outside the orbit of Neptune. Plutoids have sufficient mass to be approximately spherical in shape, but not enough mass to have pulled in debris from the neighborhood of their orbit. (Pluto is both a dwarf planet and a plutoid.)
population	The collection organisms of a particular species that can breed and reproduce.
population density	The number of individuals of a particular population living in a given amount of space.
population growth	The rate at which the number of individuals in a population increases. Usually applies to a given ecosystem, but could refer to a region or the entire Earth.
precipitation	Any product of the condensation of atmospheric water vapor deposited on Earth's surface, such as rain, snow, or hail.
predict/prediction	Extrapolation to a future event or process based on theory, investigative evidence, or experience.
principle	Rule or law concerning the functioning of systems of the natural world.
producer	An organism that produces complex organic compounds from simple inorganic molecules using energy from light or inorganic chemical reactions.
properties	Essential attributes shared by all members of a group.
proton	A small particle with an electric charge of +1 elementary charge. It is often found as a subatomic particle in the nucleus of an atom, but is also stable in an ionic form in which it is also known as the hydrogen ion, H ⁺ .
question	A grammatical form of sentence that invites an answer.

radiation	Energy in the form of rapidly propagating waves or particles emitted by a body as it changes from a higher energy state to a lower energy state.
rain gauge	An instrument used to measure the amount of liquid precipitation over a set period of time.
recombine	To disassemble, mix up, and put back together in a new arrangement.
redesign	To create a new and improved solution to a problem after an earlier solution was tested and found to be lacking in some respects.
relationship	Connections observed among systems, subsystems, or variables. Different types of relationships exist, including causal relationships and correlations.
reliability	An attribute of any investigation that promotes consistency of results during repeated trials.
responding (dependent) variable	The factor of a system being investigated that changes in response to the manipulated (independent) variable and is measured.
ribosome	A cell organelle constructed in the nucleus. It consists of two subunits and functions as the site of protein synthesis in the cytoplasm.
science	Knowledge of the natural world derived from systematic investigations; also, the activity of adding to the body of scientific knowledge.
sediment	Any particulate matter that can be transported by fluid flow and which eventually is deposited as a layer of solid particles on the bed or bottom of a body of water or other liquid.
sedimentary rock	Rocks formed by deposition of solid particles at the bottom of a body of water, followed by compaction and cementation. Common sedimentary rocks include shale, sandstone, and limestone.
sexual reproduction	The production of new generations involving the combination of chromosomes from both a male and female parent. Because each parent contributes genetic information, the offspring of sexual reproduction are usually not identical to either parent.
skepticism	The attitude in scientific thinking that emphasizes that no fact or principle can be known with complete certainty; the tenet that all knowledge is uncertain.
simulation	The imitation of some real thing, state of affairs, or process. The act of simulating something generally entails representing certain key characteristics or behaviors of a selected physical or abstract system.
Solar System	The Sun and those celestial objects bound to it by gravity, including eight planets, moons, dwarf planets, plutoids, asteroids, meteoroids, and other small bodies.
solid	The state of matter characterized by resistance to deformation and changes of volume.
solubility	The ability of a given substance to dissolve in a liquid.
solution	1. A device or process created through technological design to meet a human need or want. 2. A mixture in which particles of one substance are evenly distributed through another substance.
species	A group of organisms capable of interbreeding and producing fertile offspring.

speed	The rate or measure of the rate of motion The distance travel divided by the time of travel.
spherical	Shaped like a ball.
state of matter	Matter can exist in various states (or forms), which may depend on temperature and pressure. Traditionally, three states of matter are recognized: solid, which maintains a fixed volume and shape; liquid, which maintains a fixed volume but adopts the shape of its container; and gas, which occupies the entire volume available. Plasma, or ionized gas, is a fourth state that occurs at very high temperatures.
steam	The scientific term steam is equivalent to water vapor, an invisible gas. In common language the term refers to visible mist made up of droplets of water that have condensed when steam meets cooler air. The distinction is not necessary at the elementary level.
subsystem	The subset of interrelated parts within the larger system.
sustainable development	Policies that enable people to obtain the resources they need today without limiting the ability of future generations to meet their own needs.
system	An assemblage of interrelated parts or conditions through which matter, energy, and information flow.
technological design process	A sequence of steps used to define and solve a problem. The steps may include a definition of the problem, research about the problem, generation of possible solutions, synthesis or selection of one or more promising solutions, construction and testing of a model or prototype, redesign, and reporting.
technology	Ways that people change the natural world to solve practical problems or improve the quality of life. Technology is the result of technological design.
temperature	A physical property that determines the direction of heat flow between two objects placed in thermal contact. If no heat flow occurs, the two objects have the same temperature; otherwise, heat flows from the hotter object to the colder object.
theory	An integrated, comprehensive explanation of many facts capable of generating hypotheses and testable predictions about the natural world.
thermometer	An instrument for measuring temperature.
tools	A device used to accomplish a task that a person alone cannot accomplish. The most basic tools are simple machines.
transfer	Move from one place to another.
transform	Change from one form to another.
trials	Repetitions of data collection protocols in an investigation.
tsunami	Unusually large waves created when a body of water, such as an ocean, is rapidly displaced by an earthquake, volcanic eruption, landslide or other disruption (plural: tsunami).
validity	An attribute of an investigation that describes the degree of confidence that data collected and logical inferences are accurate representations of the phenomena being investigated.
variable	Any changed or changing factor used to test a hypothesis or prediction in an investigation that could affect the results.

variation	A measure of the tendency of individuals in a population to differ from one another.
velocity	A vector quantity whose magnitude is a body's speed and whose direction is the body's direction of motion.
water vapor	The gas phase of water.
wave	A disturbance that propagates through space and time, usually with transference of energy. Examples of wavelike phenomena are light, water waves, and sound waves.
wave amplitude	A measure of the maximum disturbance in the medium during one wave cycle (the maximum distance from the highest point of the crest to the equilibrium).
wave frequency	The number of occurrences of a wave per unit time.
wavelength	The distance between two sequential crests (or troughs) of a wave.
weathering	The decomposition of earth rocks, soils and their minerals through direct contact with the planet's atmosphere or biological agents.
weight	The strength of the gravitational pull on an object.
wind	The flow of air or other gases that compose an atmosphere.