Glossary

How to Use This Glossary

This Glossary provides the definitions of the key terms that are shown in boldface type in the text. Definitions for other important terms are included as well. The Glossary entries also show the sections where you can find the boldface words. A pronunciation guide, using the key below, appears in square brackets after selected words.

a = mask, back
ae = same, day
ah = car, farther
aw = dawn, hot
e = met, less
ee = leaf, clean
i = simple, this
ih = idea, life
oh = home, loan
oo = food, boot
u = wonder, Sun
uh = taken, travel
uhr = insert, turn

A

acid a compound that produces hydrogen ions, $H^+(aq)$, when dissolved in water (6.1)

activity series a list of elements organized according to their chemical reactivity; the most reactive element appears at the top and the least reactive element appears at the bottom (5.2)

aerosols tiny particles, such as dust, salt, and ash, that are suspended in the atmosphere and that scatter and reflect solar radiation (7.1)

albedo [al-BEE-doh] the fraction of incident light or electromagnetic radiation that is reflected by the surface of an object, such as from Earth back into space (for example, the extent of an object's ability to reflect sunlight) (7.1)

alveoli [al-VEE-oh-lih] the tiny air sacs in the lungs where gas exchange occurs (3.2)

anaphase the phase of mitosis in which the centromere splits apart and the chromatids are pulled to opposite sides of the cell by the spindle fibres (1.3)

angle of incidence ($\angle i$) the angle between the incident ray and the normal in a ray diagram (10.2)

angle of reflection ($\angle r$) the angle between the reflected ray and the normal in a ray diagram (10.2)

angle of refraction ($\angle R$) the angle between the normal and a refracted ray (11.1)

anion [AN-ih-uhn] a negatively charged ion (4.1)

antacid a substance capable of neutralizing an acid (6.3)

anthropogenic [an-thruh-puh-JEN-ik] relating to or resulting from the influence of humans (7.1)

anthropogenic greenhouse effect the increased capacity of the atmosphere to absorb and prevent the escape of thermal energy because of an increase in greenhouse gases introduced by human activity (8.2)

antibodies specialized, disease-fighting proteins used by the immune system to bind specific antigens; some are always present in the body, while others are produced in response to antigens (3.3)

antigen any material that stimulates an immune response in the body (3.3)

aorta the main blood vessel carrying oxygenated blood from the heart to branch arteries that lead to the rest of the body (3.2)

apparent depth an effect observed in water in which the image of an underwater object appears closer to the surface than the object actually is (11.3)

astigmatism blurred or distorted vision usually caused by an incorrectly shaped cornea (12.3)

atmosphere a layer of gases that surrounds a planet or moon (7.1)

axis of symmetry a line that divides a shape into two congruent parts that can be matched by folding the shape in half (12.1)

B

balanced chemical equation a skeleton equation with coefficients added to balance the number of atoms (4.3)

base A compound that forms hydroxide ions, $OH^-(aq)$, when dissolved in water (6.1)

bias [BIH-uhs] a tendency toward a particular perspective or point of view that prevents objective assessment of a topic (9.3)

biconcave a lens that is concave on both sides (12.1)

biconvex a lens that is convex on both sides (12.1)

binary acid an acid composed of hydrogen and a non-metal (6.1)

binary ionic compound A compound composed of a metal cation and a non-metal anion (4.1)

binary molecular compound a compound composed of two non-metals joined by one or more covalent bonds (4.2)

biogeochemical cycle a natural process that exchanges matter and energy between the abiotic environment to living things and back to the abiotic environment (8.3)

bioluminescence [BIH-oh-loo-muh-NES-uhns] light that is produced by a biochemical reaction in a living organism (10.1)

biome the largest division of the biosphere; includes large regions that have similar biotic components (such as plants and animals) and similar abiotic components (such as temperature and amount of precipitation) (7.2)

biophotonics all procedures and devices that use various light technologies to work with living systems, including humans (3.3)

blood clot a clumping of blood cells within a vessel (3.2)

boundary the surface between two media (11.1)

bronchi the two tubes branching from the trachea where air passes into the lungs (3.2)

bronchioles [BRONG-kee-olz] the numerous smaller tubes branching from the bronchi (3.2)

C

cancer cells with abnormal genetic material that are dividing uncontrollably and can spread to other body parts (1.4)

cancer screening tests used to detect cancer cells at an early stage of the disease so that it can be treated more effectively (3.3)

carbon footprint the effect that human activities have on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide (9.3)

carbon offset a means of reducing or avoiding greenhouse gas emissions in order to achieve carbon neutrality, either by performing actions that remove greenhouse gases from the atmosphere or by purchasing credits to negate a carbon footprint (9.3)

catalyst a substance that increases the rate of a reaction and is regenerated at the end of the reaction (5.3)

cation [KAT-ih-uhn] a positively charged ion (4.1)

cell the smallest unit that can perform the functions of life (1.1)

cell cycle a continuous sequence of cell growth and division, including the stages of interphase, mitosis, and cytokinesis (1.4)

cell cycle checkpoints a point in the life of a cell when proteins determine whether cell division should or should not occur (1.4)

cell differentiation a stage of development of a living organism during which specialized cells form (2.1)

cell division the process by which a parent cell divides into two daughter cells (1.3)

cell plate a structure that helps to form the cell wall in the process of plant cell cytokinesis (1.3)

cell specialization the process by which cells develop from similar cells into those that have specific functions within a multicellular organism (2.1)

chemical equation a representation of what happens to the reactants and products during a chemical change (4.3)

chemical reaction a process in which new substances with new properties are formed (4.3)

chemiluminescence [kem-uh-loo-muh-NES-uhns] light that is produced by a chemical reaction (10.1)

chlorofluorocarbon (CFC) a human-made chemical compound that contains chlorine, fluorine, and carbon; when released into the atmosphere, it may cause depletion of the ozone layer (8.2)

chromatic aberration the dispersion of light through a lens (12.1)

chromosome in a cell nucleus, a thread-like structure made mostly of DNA (1.2)

cilia [SIL-ee-ah] microscopic, hair-like projections on epithelial cells that may secrete mucus and help to keep foreign particles out of the body (3.2)

cladding covering that surrounds the glass core of an optical fibre (11.2)

climate the characteristic pattern of weather conditions within a region, including temperature, wind velocity, precipitation, and other features, averaged over a long period of time (7.1)

climate model a mathematical or computer program that describes, simulates, and predicts the interactions of Earth's atmosphere, oceans, land surface, and ice to simulate past, present, and future climate conditions (9.2)

climate zones large regions of Earth's surface that share similar weather conditions (7.2)

climatograph a graph of climate data for a specific region; the data are usually obtained over 30 years from observations made at local weather stations (7.2)

cloning the process of creating identical genetic copies of an organism (1.2)

closed system a system in which energy enters and leaves the system but matter does not cross the system's boundary (8.1)

coefficient a number placed in front of a chemical formula in a balanced chemical equation (4.3)

concave mirror a mirror whose reflecting surface curves inward (10.3)

concentration the amount of a particular substance in a specific amount of another substance; also, the amount of dissolved substance contained per unit of volume of solvent (8.2)

converge to bring together (12.1)

converging lens a lens that brings parallel light rays toward a common point (12.1)

convex mirror a mirror whose reflecting surface curves outward (10.4)

cornea tissue that forms a transparent, curved structure in the front of the eye; refracts light before it enters the eye (12.3)

covalent compound See molecular compound

crest the highest point of a wave (10.1)

critical angle ($\angle c$) the angle of incidence that produces an angle of refraction of 90° (11.2)

cross-over method a method for determining the formula of an ionic compound (4.1)

crystal lattice a repeating pattern of ions arranged in three dimensions (4.1)

cytokinesis [sih-toh-ki-NEE-sis] following mitosis, the separation of the two nuclei and cell contents into two daughter cells (1.3)

cytoplasm [SIH-toh-pla-zum] the cytosol and organelles contained by the cell membrane (1.1)

D

dead zones areas in Earth's oceans, lakes, and rivers where growth of algae results in the removal of oxygen from the water, which causes fish and other animals to die (8.3)

decomposition reaction a chemical reaction in which a compound breaks down (decomposes) into two or more simpler compounds or elements (5.1)

deforestation the destruction of the world's forests through direct human activity, such as logging or slash-and-burn clearing for agriculture and grazing, and through the indirect effects of climate change, pollution, and acid precipitation (7.3)

dermal tissue the outermost protective layer of a plant (2.1)

desertification the process by which land slowly dries out until little or no vegetation can survive and the land becomes a desert (7.3)

dispersion the process of separating colours by refraction (11.1)

diverge to spread out in different directions (12.1)

diverging lens a lens that spreads parallel light rays away from a common point (12.1)

DNA material found in the cell nucleus that contains genetic information (1.2)

DNA replication the process by which DNA is copied, creating sister chromatids joined at the centromere (1.3)

DNA screening the process of testing individuals to determine whether they have the gene or genes associated with certain genetic disorders (1.2)

double displacement reaction a chemical reaction in which the positive ions of two different compounds exchange places; results in the formation of two new compounds, one of which may be a precipitate (5.2)

duodenum the first metre of the small intestine, where most digestion occurs (3.2)

E

ecoregion a subdivision of an ecozone that is characterized by local landforms such as plains, lakes, mountains, and rivers (7.2)

ecozone a division of Earth's surface that has developed over a long period of time and is separated from neighbouring ecozones by a geological feature such as an ocean, desert, or mountain range (7.2)

electric discharge the process of emitting light by heating a gas, or vapour, instead of a wire with an electric current (10.1)

electromagnetic radiation energy that travels as waves that move outward in all directions from a source; includes infrared radiation, ultraviolet radiation, radio waves, X rays, gamma rays, and visible light (8.1)

electromagnetic spectrum the entire range of electromagnetic waves in order of wavelength and/or frequency (10.1)

embryonic stem cell [em-bree-AWN-ik stem cell] an unspecialized cell that can become any one of an organism's body cells (3.1)

endoscopy a technique for looking inside the body that involves inserting a tiny light and camera attached to a flexible tube into a body opening, such as the mouth or a small incision (3.2)

energy budget a description of the total energy exchange within a system; a summary of how energy from the Sun enters, moves through, and leaves the Earth system (8.1)

esophagus a muscular tube between the pharynx and the stomach (3.2)

eyepiece the lens in a telescope through which the observer views the object and through which light leaves the telescope (12.3)

F

feedback loop a process in which part of a system's output is returned, or fed back, to the input (8.1)

Fermat's principle light follows the path that will take the least time when travelling from one point to another (10.2)

fluorescence [flor-ESS-uhns] light that is emitted during exposure of the source to ultraviolet light (10.1)

focal length the distance between the vertex of a mirror and the focal point (10.3)

focal point the point on the principal axis through which reflected rays pass when the incident rays are parallel to and near the principal axis (10.3)

forcing agent any substance or process that alters the global energy balance and causes climate to change (9.2)

fossil the traces or remains of a once-living organism (9.1)

frequency the number of crests (or troughs) in a wave that pass a given point in one second (10.1)

fusion reaction a reaction that release large amounts of energy when atoms collide with so much energy that they fuse together; for example, hydrogen's fusion into helium in the Sun's core (10.1)

G

gall [GAWL] an abnormal growth of plant tissue caused by insects or micro-organisms (2.1)

gastric juices digestive secretions from the stomach wall composed of hydrochloric acid and pepsin (3.2)

gene a segment of DNA that controls protein production (1.2)

general circulation model (GCM) a complex computer program that uses mathematical equations to describe the physical processes of the atmosphere and to manipulate the variables that affect how the natural climate system works (9.2)

geostationary a satellite that travels around Earth's equator at a speed that matches the speed of Earth's rotation, so that the satellite remains in the same position relative to Earth's surface (9.2)

global carbon budget the relative amounts of carbon in different parts of the carbon cycle; also an accounting of the exchanges (incomes and losses) of carbon between the stores of the carbon cycle (8.3)

global warming an increase in global average temperature (7.3)

global warming potential (GWP) the ability of a substance to warm the atmosphere by absorbing thermal energy (8.2)

greenhouse effect the natural warming caused when gases in Earth's atmosphere absorb thermal energy that is radiated by the Sun and Earth (7.1)

greenhouse gas a gas in Earth's atmosphere that absorbs and prevents the escape of radiation as thermal energy; examples include carbon dioxide and methane (8.2)

ground tissue most of the inner tissues of a plant, including palisade cells, mesophyll cells, and other specialized cells (2.1)

H

halocarbons a large group of chemicals formed from carbon and one or more halogens, such as chlorine, fluorine, or iodine (8.2)

heart attack death of or damage to heart muscle tissue caused by insufficient blood supply (3.2)

hydrosphere the collective mass of water found on, under, and over the surface of Earth in the form of liquid water, ice, and water vapour (7.1)

hydroxide a chemical compound containing hydrogen and oxygen (4.1)

hyperopia [hi-per-OPE-ee-ah] far-sightedness; the condition in which the eye cannot focus on nearby objects (12.3)

I

ice core a long cylinder of ice obtained by drilling into a glacier (9.1)

incandescence [in-can-DESS-uhns] light emitted from a material because of the high temperature of the material (10.1)

incident ray a ray of light that travels from a light source toward a surface (10.2)

index of refraction the ratio of the speed of light in a vacuum to the speed of light in a given medium (11.1)

indicator a chemical that changes colour in response to changes in the concentration of hydrogen ions or hydroxide ions (6.2)

Industrial Revolution a period in the late 1700s that saw a rapid increase in the rate at which new machines were invented and new methods of transportation and manufacturing were adopted (7.1)

interphase periods of growth in the life of a cell; consists of two growth stages and a stage of DNA replication (1.4)

ion a charged particle formed from the loss or gain of one or more electrons (4.1)

ionic compound a compound composed of oppositely charged ions (4.1)

isotope any of two or more forms of an element that have the same number of protons but a different number of neutrons (for example, deuterium is an isotope of hydrogen) (9.1)

J

jet stream high-altitude winds that travel long distances at very high speeds (7.1)

K

Köppen climate classification system a method of identifying and describing climates based on observable features such as temperature ranges and rates of precipitation (7.2)

L

large intestine organ divided into the colon, rectum, and anus, where water, salt, and vitamins are absorbed, and feces are formed and eliminated (3.2)

law of conservation of mass the mass of products produced by a chemical reaction is always equal to the mass of the reactants (4.3)

laws of reflection 1. The incident ray, reflected ray, and the normal always lie in the same plane. 2. The angle of incidence is equal to the angle of reflection. (10.2)

leaching a technique used to extract metals by dissolving the metal in an aqueous solution (5.3)

lens a transparent object with at least one curved side that causes light to bend (12.1)

liming the application of basic materials, typically lime-based, to renew acidified lakes and regions (6.3)

luminescence [loo-mi-NESS-uhns] the emission of light by a material or an object that has not been heated; for example, fluorescence (10.1)

M

magnification the change in size of an optically produced image (10.3)

magnification equation an algebraic formula used to predict the size of an image formed by a thin converging lens (12.2)

$$m = \frac{h_i}{h_o} = \frac{-d_i}{d_o}$$

medical imaging technology techniques used to form an image of a body's internal cells, tissues, and organs (3.2)

medium substance through which light travels (10.2)

meristematic stem cell [MER-es-te-MA-tik stem cell] an unspecialized cell found in plants that gives rise to a specific specialized cell (2.1)

metaphase the phase of mitosis in which the chromosomes are aligned across the centre of the cell (1.3)

micrograph a photograph taken with a microscope (1.1)

microscopy the science of using microscopes to view samples or objects (1.1)

mirage an optical effect caused by the bending of light rays passing through layers of air that have very different temperatures (11.3)

mitosis [mih-TOH-sis] the process by which the duplicated contents of the cell's nucleus divide into two equal parts (1.3)

molecular compound a compound formed when atoms of two or more different elements share electrons (4.2)

molecule A neutral particle composed of two or more atoms joined together by covalent bonds (4.2)

monitor to measure conditions systematically and repeatedly in order to track changes (9.2)

mucus [MYOO-cuhss] protective secretions from the stomach wall that prevent the stomach lining from breaking down (3.2)

multivalent metal [muhl-ti-VAE-luhnt MET-uhl] a metal that can form different ions (4.1)

mutagen a substance or factor that can cause a mutation in DNA (1.2)

mutation a change in the DNA of an organism (1.2)

myopia [my-OPE-ee-ah] near-sightedness; the condition in which the eye cannot focus on distant objects (12.3)

N

negative feedback loop a feedback loop in which each process acts to decrease the effects of the initial process or event and helps maintain equilibrium (8.1)

neutralization the reaction of an acid and a base to produce a salt and water (6.3)

night-vision device an artificial device that allows people to see when only a very small amount of light is available (12.3)

nitrogen fixation the process by which atmospheric nitrogen is changed into forms that can be used by plants and other organisms (8.3)

normal a line constructed to be perpendicular to a surface where a ray of light meets the surface (10.2)

nucleus [NOO-klee-us] the organelle that controls the cell's activities (1.1)

O

objective lens the lens through which light enters a telescope (12.3)

open system a system in which energy and matter cross the system's boundary (8.1)

organ a combination of several types of tissue working together to perform a specific function (2.1)

organelle a specialized structure in a cell (1.1)

oxoacid an acid composed of hydrogen, oxygen, and another element (6.1)

ozone a greenhouse gas that is composed of three atoms of oxygen; it is commonly found in a concentrated layer in the stratosphere (8.2)

P

paleoclimatologist a scientist who studies past climates on Earth (9.1)

partial reflection and refraction a phenomenon in which some of the light that is travelling from one medium into another is reflected and some is refracted at the boundary between the media (11.2)

parts per million (ppm) a unit of measurement that indicates the number of parts of a substance per million parts of another substance; for example, for salt water, 1000 ppm of salt means 1000 parts salt in 1 000 000 parts of pure water (8.2)

pathogen a disease-causing agent, such as a virus, bacteria, or fungus (3.3)

peroxide a chemical compound containing two oxygens covalently bonded together (4.1)

pH indicator A substance that changes colour to show the concentration of hydrogen ions (H^+) or hydroxide ions (OH^-) in a solution (6.2)

pH scale a numerical scale ranging from 0 to 14 that is used to classify aqueous solutions as acidic, basic, or neutral (6.2)

phagocyte a cell that engulfs and digests waste material and invading micro-organisms (3.3)

phloem [FLOH-um] vascular tissue that transports sap carrying the sugars produced through photosynthesis from the leaves to the rest of the plant (2.1)

phosphorescence [foss-for-ESS-uhns] light that is emitted due to exposure of the source to ultraviolet light, and that continues to be emitted for some time in the absence of the ultraviolet light (10.1)

photosynthesis the process by which carbon dioxide enters the leaves of plants and reacts with water in the presence of sunlight to produce glucose and oxygen (2.1)

plane mirror a mirror with a flat, reflective surface (10.2)

pluripotent stem cell an unspecialized cell that can develop into many, but not all, of an organism's types of body cells (3.1)

polyatomic ion an ion that is composed of more than one atom (4.1)

positive feedback loop a feedback loop in which each process acts to increase the effects of the initial process or event and results in a change in the system (8.1)

potential an ability that may or may not be developed (1.3)

precession a change in the direction of the axis of rotation of Earth; also known as wobble (7.1)

precipitate an insoluble solid formed in a chemical reaction (5.1)

presbyopia [prez-bee-OPE-ee-ah] the condition in which lenses of the eye become stiff and the ciliary muscles can no longer make the lenses change shape (12.3)

prevailing winds air currents that blow in fairly constant directions around the world (7.1)

principal axis the line that passes through the centre of curvature, *C*, of a mirror or lens and is normal to the axis of symmetry (10.3)

product a pure substance that is formed in a chemical change; the properties of the product are different from the properties of the reactants (4.3)

prophase the phase of mitosis in which sister chromatids condense and the chromosomes become visible (1.3)

public health strategy a co-ordinated effort to track, research, and reduce the incidence of specific health problems in a population (3.3)

pulmonary artery vessel that carries deoxygenated blood from the heart to the lungs (3.2)

R

rainbow an arc of colours of the visible spectrum appearing opposite the Sun, caused by reflection, refraction, and dispersion of the Sun's rays as they pass through raindrops (11.3)

ray a straight line with an arrowhead that shows the direction in which a light ray is travelling (10.2)

reactant a pure substance that undergoes a chemical change (4.3)

real image an image that is formed when reflected rays meet (10.3)

reflected ray a ray that begins at the point where the incident ray and the normal meet (10.2)

reflecting telescope a telescope that uses a combination of mirrors and lenses (12.3)

reflection the change in direction of a light ray when it bounces off a surface (10.2)

refracted ray the ray that is bent upon entering a second medium (11.1)

refracting telescope a telescope that uses lenses only (12.3)

refraction the bending of light as it travels, at an angle, from a material with one refractive index to a material with a different refractive index (11.1)

retina a layer of rod and cone cells that respond to light and initiate nerve impulses; rod cells are very sensitive to light but cannot distinguish between colours; cone cells detect colour (12.3)

retroreflector a material that reflects light back to its source (11.2)

root system a system that takes in water and minerals from the soil and transports them to the shoot system (2.2)

S

sedimentary rock a type of rock formed by the deposition of sediment (9.1)

shatter cones rare rock formations that form from meteorite impacts (6.3)

shimmering the apparent movement of objects in hot air over objects and surfaces (11.3)

shoot system a system that supports the plant, performs photosynthesis, and transports sap (2.2)

single displacement reaction a chemical reaction in which one element takes the place of another element in a compound (5.2)

sink a process or reservoir that removes greenhouse gases from the atmosphere (8.2)

skeleton equation a word equation in which the words are replaced by chemical formulas (4.3)

small intestine organ between the stomach and the large intestine, where most digestion occurs (3.2)

smog a form of air pollution produced by the reaction of sunlight with chemical compounds, such as hydrocarbons and nitrogen oxides, in the air (8.3)

source a process that adds greenhouse gases to the atmosphere (8.2)

specific heat capacity the amount of thermal energy that must be added to or removed from a substance to raise or lower the temperature of 1 g of the substance by 1°C (7.1)

spherical relating to a sphere or to the properties of a sphere (10.3)

spherical aberration irregularities in an image in a curved mirror that result when reflected rays from the outer parts of the mirror do not go through the focal point (10.3)

sphincter a circular muscle that contracts and relaxes to control the passage of substances (3.2)

stable octet an atom with a full outer energy level of electrons (8.1)

stem cell an unspecialized cell that can produce various types of specialized cells (3.1)

store a part of a biogeochemical cycle in which matter or energy accumulates; also called a reservoir (8.3)

stroke loss of brain function caused by an interruption of blood flow (and therefore oxygen supply) to the brain (3.2)

synthesis reaction a chemical reaction in which two or more reactants combine to produce a new product (5.1)

system a group of interdependent parts that work together to form a single, functioning whole (8.1); in biology, a group of tissues and organs that perform specific functions (2.2)

T

tectonic plate a piece of Earth's outer shell (the lithosphere) that moves around on the slowly flowing, underlying rock layer (the asthenosphere) (7.1)

telophase the phase of mitosis in which two daughter nuclei are formed (1.3)

ternary compound a compound composed of three different elements (4.1)

thermohaline circulation a three-dimensional pattern of ocean circulation driven by wind, heat, and salinity that is an important component of the ocean-atmosphere climate system (8.1)

thin lens equation an algebraic formula used to predict the position of an image formed by a thin converging lens (12.2)

$$\frac{1}{f} = \frac{1}{d_o} + \frac{1}{d_i}$$

tissue a cluster of similar cells that share the same specialized structure and function (2.1)

total internal reflection the phenomenon in which incident light is not refracted but is entirely reflected back from the boundary; occurs when light travels from a medium in which its speed is lower to a medium in which its speed is higher (11.2)

totipotent stem cell [toh-tee-POH-tent stem cell] an unspecialized cell that can develop into any one of an organism's body cells (3.1)

trachea [TRAE-kee-uh] the main tube through which air passes from the mouth into the bronchi (3.2)

transgenic organism an organism whose genetic information has been altered with the insertion of genes from another species (1.2)

transpiration the evaporation of water from leaves (2.2)

trough [TRAWF] the lowest point of a wave (10.1)

tumour an abnormal clump or group of cells (1.4)

V

vaccination the process of giving a vaccine by mouth or injection to provide active immunity against a disease (3.3)

valence electron an electron in the outermost occupied energy level (4.1)

valve flexible flap of tissue that ensures one-way flow of blood (3.2)

vascular tissue structures that transport sap and provide vertical support for the plant's body (2.1)

virtual image an image formed by rays that appear to be coming from a certain position, but are not actually coming from that position; image does not form a visible projection on a screen (10.2)

W

wave front the crest, or high point, of a wave (11.1)

wavelength the distance from one crest (or trough) of a wave to the next crest (or trough) (10.1)

weather the condition of the atmosphere in a specific place at a specific time (7.1)

wind the movement of air from an area of high pressure to an area of low pressure (7.1)

word equation an equation in which the products and reactants in a chemical reaction are represented by words (4.3)

X

xylem [ZIH-lum] vascular tissue that conducts water and minerals from the roots to the leaves (2.1)