

# Living Things in Their Environment

## GLOSSARY



**acid rain** Rain that is more acidic than normal rain.

**biomass** A measure of how much matter there is in an organism.

**cell** The functional unit of living things.

**cell membrane** The membrane that surrounds a cell and controls the movement of substances into and out of the cell.

**cell wall** The thick wall outside the cell membrane of plant cells that provides support to the plant.

**central vacuole** A fluid-filled sac that stores food, water, and wastes in a plant cell.

**chlorophyll** The green pigment in plants that absorbs light energy from the Sun and uses it in photosynthesis.

**chloroplast** The organelle in a plant cell that contains chlorophyll.

**consumer** An organism that obtains its food by eating other organisms.

**contractile vacuole** An organelle that pumps excess water out of some cells.

**control** The part of an experiment that stays the same. It is used for comparison with the parts of the experiment that were changed.

**cytoplasm** The jellylike material that fills a cell and holds the cell organelles.

**decomposer** An organism that feeds on the wastes and dead bodies of other organisms.

**dependent variable** The factor that is measured in an experiment.

**diffusion** The movement of particles of a substance from an area in which there are a lot of particles to an area in which there are fewer particles.

**ecosystem** A group of living things and the environment in which they live and interact with one another.

**energy** What an organism needs to power its life processes, such as making new cell parts, reproducing, moving, and growing.

**experiment** A procedure used to answer a scientific question.

**eyespot** A red spot near the front of a *Euglena* that is part of its light-sensing system.

**fertilizer** A mixture of substances that plants need to grow and perform their life processes.

**flagellum** An appendage that sticks out from the front of a *Euglena* cell and allows the organism to swim.

**focus** The sharpness of an image as seen through a microscope.

**food chain** A graphic representation of the movement of energy through an ecosystem.

**glucose** A simple sugar made during photosynthesis; stored as starch.

**gravitropism** A plant's behavior in response to the force of gravity; plant roots grow down in response to gravity.

**habitat** A place in the environment where an organism lives. A habitat provides food, water, and shelter for the organism.

**homeostasis** The maintenance of a stable internal environment within an organism.

**hypothesis** An idea or educated guess about what might happen in an experiment; a possible answer to the question posed by the experiment.

**image** The appearance of a magnified object as seen through a microscope.

**independent variable** The factor that is being tested in an experiment.

**indicator** A substance that shows the presence of another substance by changing color.

**innate behavior** Behavior that an organism is born with; it does not have to be learned.

**learned behavior** Behavior that must be learned by an organism.

**lens** A curved piece of transparent glass or plastic used to magnify objects.

**magnification** The degree to which an object is enlarged, or magnified, by a lens.

**metabolism** The sum of all the life processes that take place in an organism.

**microorganism** An organism that is too small to be seen with the unaided eye.

**mineral** A naturally occurring material in Earth's crust; needed by plants for photosynthesis and growth.

**multicellular** An organism that has a body made of many cells.

**nitrogen** A mineral found in the bodies of all living things; an important component of proteins, DNA, and chlorophyll.

**nucleus** The cell organelle that houses the genetic material of the cell.

**nutrient** A substance that promotes healthy growth of living things.

**organelle** A membrane-bound structure inside a cell that performs a certain function for the cell.

**osmoregulation** A cellular process of keeping solutes and water balanced.

**osmosis** The diffusion of water molecules across a selectively permeable membrane.

**photosynthesis** The process by which plants use chlorophyll to trap light energy and use the energy to make glucose.

**phototropism** A plant's behavior in response to a light source; plants grow toward light.

**pollutant** Any substance that pollutes, or contaminates, the environment.

**pollution** The contamination of the environment by pollutants.

**power** A measure of the magnification strength of a lens.

**producer** An organism that captures the Sun's energy and uses it to make food.

**selectively permeable** A membrane that allows some substances to pass into and out of the cell while preventing other substances from passing through.

**solute** Particles of a substance that are dissolved in a solvent.

**solution** A mixture of solute particles that are evenly distributed in a liquid.

**solvent** The liquid portion of a solution.

**specimen** The object being magnified by a lens.

**starch** A large molecule made up of smaller units of glucose; stores food for a plant.

**stimulus** Something in the environment that causes a response in an organism.

**tropism** A response by a plant to something in the environment.

**unicellular** An organism that has a body made of a single cell.

**Note:** The Science Reader includes its own glossary of terms.