

GLOSSARY

- arm** The rigid beam or bar of a lever.
- axle** A shaft inserted into the middle of a wheel.
- bacteria** One-celled microorganisms, some of which function as agents of decay by breaking down dead plants and animals.
- capacity** A measure of the maximum amount of material a container can hold.
- centimeter (cm)** A metric standard unit of measure for length; one-hundredth of a meter.
- cloud** A mass of water vapor and water droplets that have condensed on particles high in the atmosphere.
- conclusion** A statement that describes what an experiment showed, based on data collected.
- condensation** The change from a gas to a liquid.
- conduction** The transfer of heat energy from particle to particle through a substance.
- consumer** An organism that obtains its food by eating other organisms.
- controlled variable** A factor in an experiment that can change but is kept constant.
- customary system** The official United States system of measurement.
- data** Information collected in an experiment.
- decay** To break down into tiny particles; due to the action of microorganisms such as molds and bacteria.
- decomposer** An organism that breaks down dead plant and animal matter into nutrients.
- dependent variable** A factor in an experiment that changes in response to a change in the independent variable.
- dew** Water droplets that have condensed on solid substances, such as grass, on cold mornings when the air is saturated with water.
- dissect** To cut or separate into small pieces and examine carefully.
- effort** The force needed to move a load.
- equal-arm balance** A beam supported by a fulcrum at a fixed balance point and used to measure mass.
- evaporation** The change from a liquid to a gas.
- food chain** An arrangement of organisms that shows the order in which energy is passed upward through an ecosystem from producers to different levels of consumers.
- food web** All the interacting food chains in an ecosystem.
- force** A push or a pull.
- friction** The resistance to motion that occurs when the surfaces of two objects rub against each other.
- fulcrum** The support around which a lever arm pivots.
- gear** A wheel with teeth evenly spaced around the rim.
- glacier** A huge, slow-moving mass of ice and snow.
- graduated cylinder** A narrow, straight-sided container for measuring the volume of liquids.
- gram (g)** The basic metric standard unit of measure for mass.
- groove** The narrow channel in the outer rim of a pulley wheel in which a rope or chain rides.

hypothesis An educated guess about what the answer to a stated problem might be.

independent variable A factor that is changed in an experiment.

international standard unit of measure A unit of measure in the metric system, in use by all the major countries in the world except the United States.

lever A simple machine consisting of a rigid bar that rests on and pivots around a support.

liter (L) The basic metric standard unit of measure for capacity.

load An object that requires force to be moved over a distance.

lubricant A slippery substance used to reduce the friction between two solid surfaces.

machine A mechanical device that helps us do work.

mass The amount of matter in an object.

meter (m) The basic metric standard unit of measure for length.

metric system A system of measurement developed in France in the late 1790s and based on a fixed unit of length called the *meter*.

milliliter (mL) A metric standard unit of measure for capacity; one-thousandth of a liter.

model An object that represents something that is too large or too small to observe directly.

mold A fuzzy growth that forms on the surface of organic matter, caused by fungus in the presence of dampness or decay.

nutrients Materials used for food; substances that are needed for growth and development.

organism Any living thing, including all plants and animals.

pellet A small, usually rounded packet of a substance.

pitch How high or low a sound is.

pivot To rotate, swing, or turn around a point or axis.

pluck To pull quickly to snap.

polluted Made unclean or impure; contaminated.

precipitation Rain, sleet, snow, hail, and other forms of condensed water vapor in the atmosphere that fall to Earth's surface.

predator An animal that hunts and eats other animals.

prey An animal that is hunted and eaten by other animals.

primary consumer An animal that eats plants.

producer An organism, such as a plant, that uses sunlight to produce food from carbon dioxide and water.

property A characteristic of an object or substance that can be used to describe or identify it.

pulley A simple machine that consists of a grooved wheel that spins around a stationary axle. The outer rim of the pulley is grooved to fit a rope or chain.

roller A cylindrical wheel.

secondary consumer An animal that eats other animals.

simple machine A mechanical device that has just one moving part and requires only manual force from people or animals to perform work. The lever, the wheel and axle (including the gear), and the pulley are simple machines.

sound waves Vibrations that travel through air, solid objects, and liquids to create sound.

teeth The small, notched projections—evenly spaced and uniform in size—around the rim of a gear wheel.

terrarium A closed container in which selected living plants and sometimes small land animals are kept and observed.

tradeoff The exchange of one thing in return for another. Simple machines involve a tradeoff between the amount of force to do work and the distance over which the force must be applied.

transpiration The evaporation of water from plant surfaces, primarily leaves, into the air.

vibrate To move back and forth rapidly.

vibration A rapid back-and-forth motion.

volume *Measurement:* A measure of the amount of space occupied by a solid, liquid, or gas. *Sound:* How loud or soft a sound is.

water cycle A repeated pattern of water movement on, beneath, and above Earth's surface.

water vapor The gas state of water.

wheel Any circular object that turns around a center point, or axis.

wheel and axle A simple machine consisting of a wheel to which an axle has been attached.

work Force applied to a load or object that results in the object moving a distance.

