

Glossary

A

- abiotic factor** A nonliving part of an ecosystem. (p. 18)
- acid rain** Precipitation that is more acidic than normal. (p. 142)
- active solar system** A method of capturing the sun's energy and distributing it using pumps and fans. (p. 173)
- adaptation** The behaviors and physical characteristics of species that allow them to live successfully in their environments. (p. 32)
- air pollution** A change to the atmosphere that has harmful effects. (p. 140)
- aquaculture** The practice of raising fish and other water organisms for food. (p. 95)

B

- bedrock** Rock that makes up Earth's crust. (p. 116)
- biodegradable** Capable of being broken down by bacteria and other natural decomposers. (p. 124)
- biodiversity** The number of different species in an area. (p. 97)
- biogeography** The study of where organisms live. (p. 56)
- biomass fuel** Fuel made from living things. (p. 176)
- biome** A group of ecosystems with similar climates and organisms. (p. 62)
- biotic factor** A living part of an ecosystem. (p. 17)
- birth rate** The number of births in a population in a certain amount of time. (p. 25)

C

- canopy** A leafy roof formed by tall trees. (p. 63)
- captive breeding** The mating of endangered animals in zoos or preserves. (p. 104)
- carnivore** Consumer that eats only animals. (p. 46)
- carrying capacity** The largest population that an area can support. (p. 27)
- catalytic converter** A device that reduces carbon monoxide emissions from vehicles. (p. 156)
- chlorofluorocarbons** Gases containing chlorine and fluorine (also called CFCs). (p. 145)
- clear-cutting** The process of cutting down all the trees in an area at once. (p. 92)
- climate** The typical weather pattern in an area over a long period of time. (p. 59)

- combustion** The burning of a fuel. (p. 165)
- commensalism** A relationship between two species in which one species benefits and the other is neither helped nor harmed. (p. 37)
- community** All the different populations that live together in an area. (p. 20)
- competition** The struggle between organisms for the limited resources in a habitat. (p. 33)
- composting** Helping the natural decomposition process to break down certain wastes. (p. 127)
- condensation** The process by which a gas changes to a liquid. (p. 53)
- coniferous trees** Trees that produce their seeds in cones and have needle-shaped leaves. (p. 67)
- conservation viewpoint** The belief that people should use natural resources as long as they do not destroy those resources. (p. 88)
- consumer** An organism that obtains energy by feeding on other organisms. (p. 46)
- continental drift** The very slow motion of the continents. (p. 56)
- control rod** Cadmium rod used in a nuclear reactor to absorb neutrons from fission. (p. 182)
- controlled experiment** An experiment in which all factors except one are kept constant. (p. 205)
- corrosive** Able to dissolve or break down many other substances, such as an acid. (p. 131)
- crop rotation** The planting of different crops in a field each year. (p. 118)

D

- death rate** The number of deaths in a population in a certain amount of time. (p. 25)
- deciduous trees** Trees that shed their leaves and grow new ones each year. (p. 66)
- decomposer** An organism that breaks down wastes and dead organisms. (p. 47)
- desert** An area that receives less than 25 cm of precipitation a year. (p. 64)
- desertification** The advance of desertlike conditions into areas that previously were fertile. (p. 118)
- development** The construction of buildings, roads, dams, and other structures. (p. 115)
- development viewpoint** The belief that humans should be able to freely use and benefit from all of Earth's resources. (p. 88)

- dispersal** The movement of organisms from one place to another. (p. 57)
- drought** A period of less rain than normal. (p. 150)

E

- ecology** The study of how living things interact with each other and their environment. (p. 20)
- ecosystem** All the living and nonliving things that interact in an area. (p. 16)
- efficiency** The percentage of energy that is used by a device to perform work. (p. 188)
- emigration** Leaving a population. (p. 26)
- emissions** Particles and gases released into the air from a smokestack or motor vehicle. (p. 141)
- endangered species** A species in danger of becoming extinct in the near future. (p. 100)
- energy conservation** The practice of reducing energy use. (p. 187)
- energy pyramid** A diagram that shows the amount of energy that moves from one feeding level to another in a food web. (p. 49)
- erosion** The process by which water, wind, or ice moves particles of rock or soil. (p. 116)
- estimate** An approximation of a number based on reasonable assumptions. (p. 24)
- estuary** A habitat in which the fresh water of a river meets the salt water of the ocean. (p. 71)
- evaporation** The process by which molecules of a liquid absorb energy and change to the gas state. (p. 52)
- exotic species** Species that are carried to a new location by people. (p. 58)
- explosive** Capable of reacting very quickly when exposed to air or water or of exploding when dropped. (p. 131)
- extinction** The disappearance of all members of a species from Earth. (p. 100)

F

- fallow** Left unplanted with crops. (p. 117)
- fertilizer** A chemical that provides nutrients to help crops grow better. (p. 151)
- fishery** An area with a large population of valuable ocean organisms. (p. 94)
- flammable** Capable of catching fire easily and burning at low temperatures. (p. 131)

- food chain** A series of events in which one organism eats another. (p. 47)
- food web** The pattern of overlapping food chains in an ecosystem. (p. 47)
- fossil fuel** An energy-rich substance (such as coal, oil, or natural gas) formed from the remains of organisms. (p. 166)
- fuel rod** Uranium rod that undergoes fission in a nuclear reactor. (p. 182)

G

- gasohol** A mixture of gasoline and alcohol. (p. 176)
- gene** A structure in an organism's cells that carries its hereditary information. (p. 100)
- geothermal energy** Heat from Earth's interior. (p. 177)
- global warming** The theory that increasing carbon dioxide in the atmosphere will raise Earth's average temperature. (p. 146)
- grassland** An area populated by grasses that gets 25 to 75 centimeters of rain each year. (p. 65)
- greenhouse effect** The trapping of heat by certain gases in the atmosphere. (p. 146)
- groundwater** Water stored in underground layers of soil and rock. (p. 149)

H

- habitat** The place where an organism lives and that provides the things it needs. (p. 17)
- habitat destruction** The loss of a natural habitat. (p. 101)
- habitat fragmentation** The breaking of a habitat into smaller, isolated pieces. (p. 101)
- hazardous waste** A material that can be harmful if it is not properly disposed of. (p. 131)
- herbivore** Consumer that eats only plants. (p. 46)
- hibernation** A low-energy state similar to sleep that some mammals enter in the winter. (p. 67)
- host** The organism that a parasite lives in or on in parasitism. (p. 38)
- hydrocarbon** A compound that contains carbon and hydrogen atoms. (p. 166)
- hydroelectric power** Electricity produced using the energy of flowing water. (p. 175)
- hypothesis** A prediction about the outcome of an experiment. (p. 204)