

# Vocabulary

Here is a list of words that may be new or difficult to understand, or that are especially important to promoting environmental health. Knowing what these words mean can help you use this book better.

Most of the words used here are explained in the chapters. The first time they are used in a chapter, the words are printed in heavier black letters.

These words are listed in the order of the alphabet:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

## A

- A-frame level** a tool for finding a level area across a slope, made of wood in the shape of the letter A.
- Absorb** to pull into. Plants absorb water from the ground.
- Acetaminophen** a pain-relieving medicine.  
*Also called paracetamol.*
- Acetone** a toxic solvent.
- Activated charcoal** a powder made from charcoal used to absorb poison and reduce the harm it causes.
- Active ingredient** in a pesticide, the substance that kills pests.
- Acute** when something happens suddenly, and is strong, serious, or dangerous. An acute illness gets bad quickly but may not last long. *Compare with* chronic.
- Agroforestry** growing crops and trees together so they produce many benefits, such as food, firewood, and soil conservation.
- AIDS** a disease caused by the HIV virus. A person has AIDS when the body gets too weak to fight illness.
- Air pollution** the release of poisonous gases and small dust particles into the air. Burning fossil fuels causes a lot of air pollution.
- Algae** very small plants with no roots, stems, or leaves, that grow in water and in wet places.
- Allergy, allergic reaction** a problem, such as itching, sneezing, hives or rash, and sometimes difficult breathing or shock, that affects some people when specific things are breathed in, eaten, injected, or touched. The things that cause allergies are called allergens.
- Anemia** a disease in which the blood gets weak and thin from the lack of red blood cells. It is caused by a lack of iron in the diet, destruction by toxics of the body's ability to make blood or red blood cells, or loss or destruction of blood faster than the body can replace it.
- Antibiotic** a medicine used to fight infections caused by bacteria.
- Antibiotic resistance** when bacteria are no longer killed by an antibiotic. Antibiotic resistance can be caused by taking antibiotics unnecessarily, or dumping them into the environment.

**Artemisinin** a medicine used to treat malaria.

**Asbestos** a toxic material that does not burn and has been used to make fire-resistant building materials and protective clothing. Asbestos is mined and milled into tiny threads that can get into the lungs and cause a serious illness called asbestosis.

**Asthma** a disease of the lungs that causes difficulty breathing, often with a hissing or wheezing sound. Asthma attacks are caused by specific allergens and air pollution.

**Autoclave** a machine that disinfects using steam heat and pressure. Commonly used in hospitals and clinics.

## B

**Bacteria** living things too small to see. Some bacteria cause infectious diseases, and are often called germs. Other bacteria help break down organic matter and keep soil healthy.

**Benzene** a dangerous solvent.

**Bilharzia** a disease caused by worms that live in water snails. *Also called* blood flukes and schistosomiasis.

**Biodiversity** the great number of different kinds of plants, animals, and insects that live on Earth.

**Biogas** mostly methane gas produced by rotting organic matter. Biogas burns cleanly and can be used for fuel.

**Biomass** waste material from plants and animals, commonly used as a fuel.

**Birth defect** a physical or mental problem a child is born with, such as a cleft lip or mental slowness. Birth defects are sometimes caused by toxic chemicals. *Also called* genetic defects.

**Black seed** a seed from India and the Middle East used in treating asthma attacks. *Also called* *Nigella sativa*.

**Bleach** a chemical used to purify water, and to disinfect surfaces and equipment.

**Blood fluke** infection caused by a tiny worm that lives in water snails. *Also called* schistosomiasis and bilharzia.

**Brominated flame retardant (BFR)** a toxic chemical used in many consumer products such as electronics, furniture, and textiles to reduce the danger of them catching on fire.

**Bronchitis** a lung disease that causes cough, fever, and pain in the chest.

**Bronchodilator** a kind of medicine used to open airways, and relieve chest pain and breathing problems.

## C

**Cadmium** a toxic heavy metal used in electronics and other production processes.

**Cancer** a disease which causes cells to grow in an uncontrolled way that damages the body. Cancer can affect many parts of the body. Many cancers are related to toxic chemicals and industrial pollution.

**Carbon dioxide** a gas that people and animals breathe out, and that is produced when fossil fuels are burned. Carbon dioxide from burning fossil fuels is the leading cause of global warming. *Also called* CO<sub>2</sub>.

**Carbon monoxide** a poisonous, colorless, odorless gas produced by cars, cigarettes, burning natural gas, and other sources. *Also called* CO.

**Catchment, catchment area** an area of land that catches rainwater and sends it downhill into streams and rivers, or underground to be stored as groundwater. Catchment is another word for watershed, and also the highest part of a watershed.

**Cell** the smallest part of any living thing. All people, animals, and plants are made of cells.

**Certification program** lets people who buy products know that they were grown in environmentally or socially healthy ways. Crops can be certified as organic, forest products can be certified as sustainably harvested, and so on. Certification may bring higher prices to the seller.

**Chemical body burden** the amount of toxic chemicals present in the human body at any time.

**Chlorine** a strong chemical, commonly called bleach, used to kill germs and disinfect water. Chlorine is also used to bleach paper and to make PVC plastic. When products containing chlorine are burned, they release toxic gases such as dioxins and furans.

**Chloroquine** a medicine used to treat malaria.

**Cholera** a disease caused by drinking water or eating food contaminated by bacteria. Often spread by dirty water, cholera causes severe vomiting and diarrhea.

**Chromium** a toxic heavy metal used in leather tanning and other industries.

**Chronic** something that lasts for a long time or that happens often. A chronic illness lasts for many years and is difficult to treat or cure. *Compare with* acute.

**Clindamycin** an antibiotic used to treat malaria and other infections.

**Cistern** a large tank for collecting and storing water.

**Clean production** methods of manufacturing that greatly reduce or eliminate toxic wastes. Clean production promotes the use of renewable energy and materials.

**Clear cut logging** when most of the trees in an area are cut down.

**Climate** the weather that a place has over a period of time.

**Climate change** the way many places now have different weather than they used to have. Climate change is related to global warming, and is caused by burning fossil fuels.

**Community** all the people who live in a certain area and interact with one another. A community may be a neighborhood or an entire village, or it can be a group of people, such as farmers, mothers, or people who attend the same church, who share common interests, common needs, and common problems.

**Community seed stewardship** when communities maintain a diverse collection of seeds for the future and keep careful records of them.

**Compact, compaction** when soil is pressed down and becomes hard due to loss of organic matter, excess irrigation, or people or animals walking or driving on it. Compacted soil cannot hold much air or water, and leads to erosion.

**Companion planting** planting different crops together to promote healthy crops by reducing pest problems and making the best use of soil nutrients.

**Compost** natural plant food made from decomposed food scraps, crop and plant wastes, manure, and other organic matter.

**Conservation** saving natural resources from being wasted or destroyed.

**Constructed wetland** a pit or basin filled with wetland plants which filter and clean waste water. *Also called a reedbed.*

**Consumer** a person who buys or uses things.

**Consumption** buying and using products and resources.

**Containment pond** a pond built to hold waste from mining or oil drilling.

**Contour, contour line** the places on a hillside or slope which are level across the slope.

**Contour barrier** a barrier, such as a wall or ditch, built on a contour line to slow, spread, and sink water into the ground and prevent erosion.

**Crop residue** stalks, leaves, roots and other plant matter left after crops are harvested. Often used in compost or as a biomass fuel.

**Crop rotation** changing where crops are grown each year to improve soil fertility.

**Cutting** a piece of a plant or tree branch that can be used to grow a new plant or tree.

**Cyanide** a very toxic chemical used in gold mining.

## D

**DDT** a pesticide used to kill malaria mosquitoes. DDT is a Persistent Organic Pollutant (POP). Overuse of DDT has caused it to be less effective in fighting malaria.

**Decay** to slowly break down and rot. *See also decompose.*

**Decompose** when living things are broken down by heat, insects, and bacteria. When plant matter decomposes, it turns to compost or rich soil.

**Deforestation** when forests are cut down and cleared.

**Degradation** making something less useful, less valuable, or less beautiful. When land or forests are abused but not destroyed they are degraded.

**Dehydration** when the body loses more water than it takes in. Dehydration is one sign of diarrhea diseases, often related to poor sanitation. Dehydration can be very dangerous, especially for children.

**Delirious** when a person is not in her or his right mind. Usually caused by a fever or other illness.

**Dengue fever** a serious illness spread by mosquitoes.

**Detoxify** to cleanse and remove poisons.

**Diabetes** a disease caused when the body cannot process sugars. *Also called sugar disease.*

**Diarrhea** frequent, runny stools. Diarrhea diseases are often caused by unsafe water and poor sanitation.

**Dilute** to make weaker by mixing with water.

**Dioxins** a group of very harmful chemicals released by burning plastic. Dioxins are Persistent Organic Pollutants (POPs).

**Disinfect, disinfection** cleaning something (water, wounds, tools, equipment, and so on) in a way that gets rid of most germs so it will not spread infection.

**Disposable** an item meant to be used once and then thrown away.

**Diversity** having many different kinds of people, animals, plants or other things in one place. *See also biodiversity.*

**Drainage** the way water is carried away from a place or seeps into the groundwater.

**Drug resistance** when certain medicines no longer work to cure an illness.

## E

**Ecological, Ecology** the relationship among living things and their environment. Something is ecological if it is good for the environment or if it acts like a natural system.

**Ecotourism** a project to earn money by bringing tourists to see the natural beauty of a place without harming the environment.

**Emphysema** a serious lung disease caused by smoking cigarettes, mining, and air pollution.

**Endometriosis** a serious illness that causes the womb's lining to grow outside of the womb.

**Environmental Impact Assessment (EIA)** a study that shows what changes are expected to happen if a project such as a mine, a dam, or a road is built.

**Enzyme** a substance produced in living things that causes chemical changes to occur, such as digesting food.

**Epidemic** a disease that spreads quickly from one person to another, making many people sick.

**Epilepsy** a disease in which a person has convulsions ("fits," seizures) and loss of consciousness.

**Ephedra** a medicinal plant used to relieve asthma attacks. *Also called* Ma Huang in China.

**Ephedrine** a medicine used to help breathing.

**Equator** an imaginary line that divides the northern half of the planet Earth from the southern half.

**Erosion** when soil and rock are worn away and carried away by wind and water.

**Estrogen** a hormone in women's bodies that controls reproduction, along with progesterone.

**Evaporation** when water dries up into the air.

**Excess** having too much of something, such as pollution or waste.

**Exotic plant or tree** a plant or tree not native to the local area.

**Exploit** to use for profit without care for long-term health.

**Exposure** when a person comes in contact with something. People are exposed to pesticides and other chemicals by breathing, swallowing, and touching.

**Extraction** taking oil, minerals, or other resources out of the earth.

## F

**Fair trade** buying and selling things for a price that is fair to both the seller and the buyer.

**Fair trade certification** lets people who buy things know that fair labor practices were used to produce them. It can result in higher and more stable prices for the producers. *See also* certification.

**Farmer field school** teaching programs that help farmers learn to solve problems themselves and to share those solutions with other farmers.

**Ferment** when food or other organic matter rots and becomes sour. This happens because bacteria enter and change the nature of the substance.

**Fertile, fertility** how well soil grows plants or how well animals and people reproduce.

**Fertilizer** material used to make the soil richer so more crops can be produced.

- Food chain** the way living things are connected to each other by how one thing eats another thing (or its products). *Also called* the food web.
- Food safety** when food is nutritious, and free of poisons and other harmful substances.
- Food security** when everyone has enough safe, nutritious, and appropriate food all year to lead an active and healthy life. Food security means food is produced and distributed in ways that promote a healthy environment, community self-reliance, and the sharing of food among people and communities.
- Food sovereignty** the right of a community, region, or nation to determine its own local food systems, including local farming, markets, fair distribution, affordable food prices, and food safety.
- Food web** See food chain.
- Forest** a large area of land covered with trees and other plants growing close together. A forest includes not just trees and plants, but also animals, insects, birds, and people who live in and rely on the forest.
- Formaldehyde** a toxic chemical used for disinfecting and cleaning, and in industrial products. Formaldehyde is dangerous and should be handled carefully, if used at all.
- Fossil fuel** a fuel made from the remains of plants and animals that died millions of years ago. Fossil fuels include oil, coal, and natural gas. Fossil fuels are nonrenewable resources, and when they are burned, they release carbon dioxide, leading to global warming.
- Fumes** odorless gases or smoke, sometimes invisible, released from chemicals or when a fire burns. Fumes are usually harmful to breathe.

## G

- Gasoline** a fossil fuel used in cars, trucks, motorbikes, and generators. *Also called* petrol.
- Genes** the parts of every living thing that determines their traits or characteristics. Genes make our eyes brown or blue, give us straight or curly hair, determine the size and shape of our hands and feet, and so on.
- Generate** to make electricity.
- Genetic damage, Genetic defect** harm to genes that results in a difference that creates a problem for that person, plant, or animal. Some toxics can cause genetic damage, and some genetic defects can be passed to offspring.
- Genetic engineering** when scientists change the genes of plants or animals, sometimes by adding genes from a different plant or animal, to change the traits or characteristics of the resulting plant or animal.
- Germ** a tiny living thing that can spread disease. Different germs cause different diseases, and spread in different ways. For example, dysentery germs are spread through feces, and tuberculosis germs spread through the air.
- Giardia** a parasite that causes yellow, bad-smelling diarrhea, cramps in the gut, and burps that smell like rotten eggs.
- Global warming** the rising of temperatures throughout the world, leading to more floods, storms, rising seawater and the spread of diseases to new areas.
- Glutaraldehyde** a toxic chemical used for sterilizing and cleaning. Glutaraldehyde is very dangerous and should be handled carefully, if used at all.
- Goiter** a swelling of the lower front of the neck caused by a lack of iodine in the diet, or by chronic cyanide poisoning.

**Greywater** water that has been used for washing or cooking. It can be reused in gardens and other places.

**Groundwater** water that flows underground. Groundwater is the source of drinking water in wells and springs. The groundwater level changes depending on rainfall and how water and land are used. *Also called* water table or aquifer.

**Guinea worm** a long, thin worm that looks like a white thread. It lives under the skin and makes a painful sore on the ankle, leg, or elsewhere on the body.

## H

**Hantavirus** an infectious disease spread when people breathe in the infected urine or feces of rodents.

**Heavy metals** metals that may be harmful when people are exposed to even very small amounts. Some heavy metals are lead, mercury, cadmium, and chromium.

**High voltage wire** wire that carries electricity from where it is generated to where it is used.

**HIV** a virus affecting millions of people worldwide. It eventually causes AIDS and the body loses the ability to fight illness. There is currently no cure, but the disease can be controlled by medicines, and by improved diet and living conditions.

**Hormones** natural chemicals the body makes to control weight, body temperature, hunger, bone strength, moods and sexual feelings, and the ability to reproduce.

**Hormone disruptor** a toxic chemical that gets into our bodies and confuses our hormones by sending false signals.

**Hybrid** a plant or animal with parents from 2 different breeds or species that have been bred to have particular traits.

**Hydrogen peroxide** a chemical used to clean and disinfect.

**Hygiene** what people do to stay clean and prevent the spread of germs. Hygiene includes washing hands and bathing, storing and preparing food, and keeping the home clean.

## I

**Ibuprofen** a medicine used to reduce pain, inflammation, and fever.

**Immunization** an injection of medicine that can prevent certain diseases. Immunizations are common for measles, tetanus, and polio. *Also called* vaccination.

**Immunization programs** mass efforts to immunize people, usually run by international health organizations like the World Health Organization (WHO) and UNICEF, national and local governments, and companies that make and sell vaccines. *Also called* vaccination programs.

**Incineration** burning things in a closed furnace in order to destroy them.

**Incinerator** a kind of oven or furnace used to burn waste.

**Incline** the steepness of a hill.

**Indoor air pollution** air pollution inside a home or building from tobacco smoke, fires, chemical products, or other sources.

**Industrial pollution** all of the forms of pollution caused by chemicals and waste products of industry.

**Inert ingredient** in a pesticide, the part that is not the active ingredient. Inert ingredients include things that make pesticides stick to plants and insects or prevent them from being washed off in the rain. These ingredients are often very poisonous.

**Infection** a sickness caused by bacteria, viruses, or other organisms. Infections may affect a part of the body or all of it.

**Infectious disease** a disease that can be spread easily from one person to another.

**Infrastructure** things that are built, such as homes, roads, and water systems.

**Injection** when medicine or other liquid is put into the body using a syringe and needle.

**Integrated pest management (IPM)** a way to control crop pests and diseases without chemicals. *Also called* natural pest management.

**Inputs** anything that a farmer uses to help crops grow, such as seeds, pesticides, and fertilizers.

**Insulation** material used to stop heat, cold, sound, or electricity from getting into or out of a place.

## J

**Jaundice** yellow color of the skin and eyes. Jaundice is a sign of liver problems or hepatitis.

**Junk food** food or drink that may taste good but is not healthy because it contains few if any nutrients, but a lot of fat, salt, sugar, oil, or chemicals.

## K

## L

**Leachate** liquid waste that seeps from a landfill or waste dump.

**Leach field** a sewage treatment system that directs waste into underground pipes with holes in them that slowly let sewage soak into the ground.

**Leukemia** cancer of the blood and bone marrow.

**Lymph system** the body's system for preventing and healing infections.

**Lymphoma** a general term for cancers that develop in the body's lymph system.

## M

**Ma huang** *See* ephedra.

**Malaria** a serious illness that causes fever, chills, aches, and can be fatal. Malaria is spread by mosquitoes.

**Malnutrition** when the body does not have enough of the foods it needs to stay healthy.

**Manganese** a toxic heavy metal used in welding and soldering.

**Mercury** a toxic, liquid, heavy metal that is used in gold mining, and in thermometers and other medical supplies. Mercury is poisonous to the touch. It is even more poisonous when it turns to gas and is breathed in, or gets in water and combines with other elements.

**Microwave** an oven that uses waves of energy to heat and disinfect things.

**Mildew** a fungus that looks like powder, dust, or tiny threads. Mildew grows in damp places.

**Mold** a fungus that grows on old food, plants, and things that are warm and wet.

**Monoculture** planting only one kind of crop on an area of land. *Also called* monocropping.

**Mulch** material spread on top of soil to protect it from sun, rain, and wind, and to prevent weeds from growing. Green manures are often used as mulch.

**Multinational corporation** a powerful business that works in many countries at once. Because they are so large, they have the power to influence governments and make or change global trading rules. *Also called* transnational corporations.

**Multiple chemical sensitivity (MCS)** an illness that causes people to have extreme allergic reactions to common toxins in paint, perfume, cars, building materials, and so on. *Also called* environmental illness.

## N

**Naphtha** a toxic solvent.

**Natural fertilizer** fertilizer made from organic matter such as animal manure, crop residue, or compost.

**Natural gas** a gas formed underground or undersea that is stored and used as fuel.

**Natural pesticide** pesticides made from natural substances like plants (garlic, peppers, marigold, and so on), milk, or vegetable oil.

**Natural succession** the stages in which plants develop on or recover from destruction of an area of land.

**Nickel** a metal used in batteries, electroplating, and smelting. Exposure to nickel may cause health problems.

**Nitrogen** a naturally occurring chemical that is important to healthy soil.

**Nitrogen-fixing plants or trees** trees or plants that put nitrogen into the soil, making it richer for growing things.

**Node** a bump on a tree branch where the leaves grow.

**Nonrenewable resource** a resource that is gone forever once it is used, such as oil. *Compare with* renewable resource.

**Non-timber forest product** any of the many things from a forest besides wood which can be sustainably harvested and sold.

**Nursery** a place where plants or trees are grown and cared for until they are strong enough to plant directly into the ground.

**Nutrient** anything that feeds plants, animals, or people. People need nutrients in food to grow strong and healthy, and plants need nutrients in soil to grow strong and bear fruit. When farmers add compost and fertilizer to the soil, they are adding nutrients.

**Nutrition** eating enough and the right kinds of food to help a person grow, be healthy, and fight off disease.

## O

**Obesity** excess weight that creates serious health problems.

**Oil** a fossil fuel, is a smooth, dark liquid formed underground. Oil is used to make petrol (gasoline), diesel, kerosene, plastics, and many other industrial products. *Also called* petroleum.

**Oil refinery** a factory where oil is made into products such as gasoline and other fuels, asphalt, and plastic. Oil refineries are a major source of air pollution.

**Organic farming** farming that does not use chemical fertilizers or pesticides. Before pesticides were invented, all farming was organic farming. The word organic also refers to the crops grown without chemicals.

**Organic certification** farmers or producers using organic or sustainable farming methods can get certified to receive higher and more stable prices for their products. *See also* certification.

**Organic matter** anything that is or was alive, that can rot and decompose, such as plants, animals, insects, and bacteria. Organic matter makes the soil rich.

**Organic waste** food scraps, crop waste, manure, and other remains of living things that break down and go back to the soil.

## P

**Paracetamol** See acetaminophen.

**Paralysis** inability to move.

**Parasites** tiny worms or animals that can live in or on a person or animal, and may cause disease.

**Passive solar design** a way to design buildings using the location and climate for natural heating, cooling, and lighting.

**PCBs** Polychlorinated biphenyls are toxic chemicals used in paints, plastics and electronic equipment. PCBs are long-lasting in the environment, and difficult to get rid of safely. PCBs are Persistent Organic Pollutants.

**Pesticide** a poisonous chemical used to kill insects, weeds, rodents, or plant diseases.

**Petrol** See gasoline.

**Petroleum** See oil.

**Pioneer species** very hardy plants that are the first to grow back on damaged lands.

**Placenta** a spongy organ in a pregnant woman's womb through which all blood and nutrients pass to the developing baby. Unfortunately, many toxics can also pass through the placenta and harm the baby even before it is born.

**Plaintiff** a person who undertakes a lawsuit because he or she has suffered some sort of harm.

**Plant breeding** when farmers select seeds to grow plants that are bigger, resist pests, taste better, or have other desirable traits. Used by farmers throughout the ages, plant breeding has resulted in the many delicious and nutritious varieties of crops we have today.

**Plastic** a material made from petroleum and other chemicals. Plastic is convenient, but making it, using it, and disposing of it can expose people to toxics.

**Plumb line** a weight hanging on a string that is used with an A-frame to measure whether a surface is level.

**Pollinate** when pollen is spread from one flower to another to make a seed or fruit grow.

**Pollinator** an insect or animal that carries pollen from one flower to another, helping to fertilize plants. The wind also helps spread pollen.

**Pollution** harmful wastes that are released into air, water, or the ground.

**Pneumonia** an illness that causes fever, coughing, and weakness.

**POPs** Persistent Organic Pollutants are a group of toxic chemicals that are very long-lasting in the environment. Dioxins and PCBs are POPs.

**Precautionary principle** the idea that "If there is reason to believe that something may cause harm, even if we do not know for certain, then it is better to avoid it than to risk doing harm."

**Predator** an animal that hunts and eats other animals.

**Progesterone** a hormone in women's bodies that controls reproduction, along with estrogen.

**Price support** a price set by the government that helps farmers by setting a higher market price for some foods they produce.

**Pseudoephedrine** a bronchodilator medicine used to open the breathing passages.

**PVC** polyvinyl chloride is a kind of plastic that contains chlorine. When produced, and also when burned, PVC releases very dangerous chemicals called dioxins and furans.

## Q

**Quinine** a medicine used to treat malaria.

## R

**Radiation** an invisible form of energy. Some radiation, such as sunlight, is natural. Some radiation, such as that from nuclear explosions and uranium, causes serious illness.

**Radiation poisoning** illnesses caused by exposure to radiation. Radiation poisoning can cause cancer, skin diseases, and other serious health problems.

**Recycle** to make something that is no longer useful or wanted into another material that can be used again.

**Refinery** See oil refinery.

**Rehydration drink** a drink made of sugar, salt, and water, or from grain and water, that helps replace liquid and restore health when a person is dehydrated.

**Renewable resource** a resource that can be used without fear of it being used up, because it will grow again, like a tree, or is part of nature, like the wind or the sun. *Compare with* nonrenewable resource.

**Reproductive health** health issues that affect the parts and processes of men's and women's bodies that allow them to make a baby.

**Resistance** the ability of something to defend itself against something that would normally harm or kill it. Bacteria can become resistant to the effects of certain antibiotics, and mosquitoes can become resistant to pesticides.

**Resource recovery** turning unused or unwanted materials into resources. Resource recovery includes reusing, recycling, and composting wastes.

**Residue** what is left over or left behind. Pesticide residue is the dry powder or oily film that stays on crops after pesticide spray dries. Crop residues include the leaves, stalks, seed coverings, and so on that remain after the crop is harvested or processed.

**Respirator** a protective mask that covers the nose and mouth to prevent people from breathing in poisons.

**Respiratory illness** an illness that interferes with breathing. Some respiratory illnesses are asthma, emphysema, and pneumonia.

**Restoration** bringing something that has been damaged back to good condition.

**Reservoir** a human-made area of water, usually collected behind a dam.

**Routine gas flare** when natural gas is separated from petroleum by burning, 24 hours a day.

**Runoff** water that moves over the surface of the land rather than soaking into the ground.

## S

**Safe water** water not contaminated with worms, germs, or toxic chemicals. Safe water is good for drinking, bathing, and washing clothes.

**Safety gas flare** when excess natural gas is separated from petroleum by burning to prevent explosions in oil pipelines.

- Sanitary landfill** a pit for wastes that cannot be reused or recycled. It is safer than an open dump.
- Sanitation** building and maintaining toilets to manage human waste in a safe and healthy way, and washing hands to prevent the spread of germs.
- Scarcity** not having enough of something, such as water or food.
- Schistosomiasis** a disease caused by worms that live in water snails. *Also called* blood flukes and bilharzia.
- Septic tank** a tank buried underground for collecting and treating sewage.
- Sewage** water used to carry away human waste in closed pipes or open ditches.
- Sewage system** a system of pipes or ditches that carries sewage to septic tanks, waste ponds, sewage treatment plants, or elsewhere.
- Sewage treatment** ways of filtering and cleaning sewage water so it can be reused or safely returned to the environment.
- Sewer** the pipes or ditches that make up a sewage system.
- Sharps** needles, blades, lancets, and other sharp medical tools or instruments. (Broken glass can also be considered a sharp.)
- Silica, silica dust** a substance found in many kinds of mining and used in many industries. Breathing silica dust can cause health problems.
- Silicosis** a serious lung disease caused by breathing in silica dust.
- Silt** tiny bits of rock and earth carried by water that eventually become an important part of healthy soil.
- Smelting** heating metals in order to work with them. Smelting often creates toxic pollution.
- Soakaway pit** a pit filled with sand and gravel to let water absorb slowly into the ground.
- Sociodrama** a short theater piece used to show a social problem and suggest solutions.
- Solar energy** energy from the sun used to generate heat or electricity.
- Solar oven** an oven that uses the sun's heat to cook.
- Solar panel** a flat panel used to capture the sun's rays and produce electricity.
- Solid waste** anything that is used and disposed of. *Also called* trash, garbage, litter, rubbish.
- Solvent** a substance, usually liquid, that can dissolve another substance. Water is a safe solvent. Gasoline, acetone, benzene, and xylene are toxic solvents.
- Stagnant water** water that does not move and often smells bad. Mosquitoes breed in stagnant water.
- Sterile** when people, plants, or animals cannot reproduce. Or, when something is free of germs.
- Sterility** inability to have children.
- Sterilize** to kill all the germs on something.
- Surface water** water that collects or runs on the surface of the earth, such as rivers, lakes, streams, and reservoirs.
- Subsidy** money given to increase or decrease prices for goods or services such as crops, oil, healthcare, etc.
- Sustainable** able to continue in an ongoing way without running out or causing excess harm, now or in the future.
- Sustainability** the ability to meet the daily needs of people now without neglecting the needs of future generations.
- Syringe** an instrument used with a needle to inject medicine.

## T

**Temperate climate** a place where there are 4 seasons: spring, summer, autumn, and winter, normal in countries further north or south of the equator. *Compare with* tropical climate.

**Toluene** a toxic solvent.

**Toxic** anything that is harmful, usually because it is poisonous and can cause illness or death.

**Toxoplasmosis** a disease caused by germs on food.

**Trade** when people, organizations, or countries exchange goods and services. Unfair trade between countries is a major cause of poverty.

**Traits** determined by genes, the things that are different and specific about every living thing, such as eye or hair color. *Also called* characteristics.

**Tree plantations** very large farms where only 1 kind of tree is grown, such as rubber, palm oil, teak, or pine.

**Tropical climate** a place that is hot and has a wet season and a dry season, normal in countries near the equator. *Compare with* temperate climate.

**Tuberculosis (TB)** a serious, infectious lung disease.

**Tumors** growths in the body, often caused by cancer.

**Turbine** a wheel turned by wind, steam, or falling water to generate electricity.

**Turpentine** a toxic solvent.

**Typhoid** an infection of the gut that is spread from feces to mouth in contaminated food and water.

## U

## V

**Vaccination** *see* immunization.

**Vaccination programs** *see* immunization programs.

**Vaporize** to turn from a liquid to a gas.

**Value-added product** a product that is no longer a raw good, but has been processed for sale.

**Ventilation** the movement of air through a house or building.

## W

**Wastewater** water that is dirty or polluted from use in homes, farms, or factories.

**Water security** regular access to sufficient, safe water.

**Water table** *see* groundwater.

**Water treatment** the different ways to make water safe for drinking.

**Watershed** an area of land that gathers water from rain, snow, and the water that seeps up from the ground into one big river, lake, or wetland. *Also called* catchment area.

**Watershed management** using and protecting the land and water resources within a watershed in a way that is healthy and sustainable.

**Wetland** a low area of land covered for much of the year with shallow water and plants. Swamps, mangrove forests, and flood plains are wetlands.

**Wind energy** electricity produced by harnessing the power of wind.

**Windlass** the part of a well that is turned to make it easier to raise the bucket of water.

**World Health Organization (WHO)** the part of the United Nations responsible for international health.

**World Trade Organization (WTO)** a powerful organization in which governments make agreements about trade among countries and multinational corporations.

## X

**Xylene** a toxic solvent.

## Y

**Yellow fever** a serious illness in Africa and some parts of South America, spread by mosquitoes.

## Z

**Zero waste** minimizing the amount of waste produced and recycling all waste materials to protect health and the environment.