Unit 1 Science Words- Say each word quietly to yourself. Then read the meaning.

investigation [in•ves•tuh•GAY•shuhn] a procedure carried out to carefully observe, study, or test something in order to learn more about it
science [SY•uhns] the study of the natural world. Science involves making observations and performing investigations.
evidence [ev•uh•duhns] information collected during a scientific investigation *Evidence* ends with the sound at the beginning of *certain*.
opinion [uh•PIN•yuhn] a belief or judgment
scientific methods [sy•uhnTIF•ik METH•uhd] ways that scientists perform investigations. Scientific methods use logic and reasoning.
experiment [ek•SPAIR•uh•muhnt] an investigation used to test an hypothesis in which all the conditions are controlled
variable [VAIR•ee•uh•buhl] any condition in an experiment that can be changed
control [kuhn•TROHL] the setup to which all the other setups are compared
microscopic [my•kruh•SKAHP•ik] too small to see with just your eyes alone
balance [BAL•uhns] a tool used to measure mass, the amount of matter in an object
spring scale [SPRING SKAYL] a tool used to measure the force, or pull, of gravity on an object
accurate [AK•yuhr•uht] correct, without error *Accurate* and *actual* begin the same way.

Unit 1 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. An investigation is a procedure used to find answers to questions about nature.
2. An investigation may involve observing, comparing, and testing.
3. Scientists look for evidence, or information, as they investigate a question.
4. Scientists draw conclusions from the results of their investigations.
5. A conclusion must be supported by evidence; an opinion need not be supported by evidence.
6. An inference is an idea based on an observation.
7. A person's opinion should not affect how the person carries out an investigation.
8. Scientists communicate the results of their investigations.
9. Clear communication helps other scientists repeat an investigation and compare results.
10. Scientific knowledge grows when scientists can expand on one another's ideas.
11. A scientific investigation always begins with a question.
12. Scientists use scientific methods based on logic and reasoning.
13. Scientists may use repeated observations or make models for an investigation.
14. In an experiment, scientists test an idea by controlling the conditions around it.
15. An experiment begins with observations and a hypothesis that can be tested.
16. An experiment should have at least two setups, with one being the control.
17. Scientists must identify all the variables, but change only one variable at a time.
18. Scientists follow a careful procedure, or set of steps, to carry out their experiment.
19. Scientists record and analyze the data they collect; they draw conclusions from their data.
20. Scientists use charts, graphs, and diagrams to display data they have collected.
21. Field scientists may use nets, hand lenses, and cameras in their investigations.
22. An electron microscope can make something look a million times bigger than it really is.
23. A dropper releases liquid drop by drop; a pipette is like a dropper but more exact.
24. Measuring is making observations that involve numbers and units, such as kilograms.
25. Scientists and most people in the world use the metric or International System (SI).
26. The metric system is based on multiples of 10.
27. Length is measured in meters; mass is measured in grams; force is measured in newtons.
28. A meter stick measures length; a balance measures mass; a spring scale measures newtons.
29. A graduated cylinder measures the volume of a liquid in liters.
30. To find the volume of a solid multiply its length by its width by its height.

Unit 2 Science Words- Say each word quietly to yourself. Then read the meaning.

solar system [SOH•ler SIS•tuhm] a group of objects in space made up of a star and the planets and other space objects that revolve around it

planet [PLAN•it] a large, round body that revolves around a star

dwarf planets [DWAWRF PLAN•its] nearly round bodies whose orbits cross the orbits of other bodies

comet [KAHM•it] a chunk of frozen gases, rock, ice, and dust

asteroids [AS•tuh•ROYDZ] rock and iron objects that orbit the sun *Asteroids* ends with the sound at the beginning of *salt*.

astronomy [uh•STRAHN•uh•mee] the study of objects in space and their characteristics *Astronomy* and *astronaut* begin the same way.

stars [STARZ] huge balls of hot, glowing gas that produce their own heat and light

universe [YOO•nuh•vers] everything that exists *Universe, unite* and *unit* begin the same way.

galaxy [GAL•uks•see] a group of billions of stars, the objects that orbit the stars, gas, and dust

Unit 2 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. In our solar system, Earth, the other plants, and other objects revolve around the sun, our star.
2. Our solar system has eight planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.
3. The inner planets—Mercury, Venus, Earth, Mars—are closest to the sun, dense, and rocky.
4. The outer planets— Jupiter, Saturn, Uranus, Neptune—are made of gases and much colder.
5. Earth has only one moon that revolves around it; the outer planets have many moons.
6. Dwarf planets, asteroids, meteoroids, and comets also orbit the sun.
7. Dwarf planets are bodies whose orbit crosses the orbit of other bodies, such as planets.
8. Asteroids, objects made of rock and iron, may be as small as a city block or a large as an ocean.
9. A comet is a chunk of frozen gas, dust, ice, and rock.
10. Meteoroids are pieces of asteroids that break off; meteorites are meteoroids that reach Earth.
11. Astronomy is the study of space and everything in it.
12. Stars form when energy stored in particles squeezed together is given off as light and heat.
13. Stars are grouped by color, temperature, brightness, and size.
14. Blue stars are the hottest; the sun is a medium-sized, yellow star.
15. A galaxy is made up of billions of stars, objects, gas, and dust held together by gravity.
16. Our solar system is in the Milky Way Galaxy.
17. The universe is made up of everything that exists.
18. Astronomer Edwin Hubble was the first scientist to study galaxies, in the 1920s.
19. Most galaxies in the universe are elliptical, egg-shaped; the Milky Way has a spiral shape.
20. When gravity pulls galaxies toward each other, they may crash, or collide.

Unit 3-Science Words-Say each word quietly to yourself. Then read the meaning.

evaporation [ee•vap•uh•RAY•shuhn] the change from a liquid to a gas *Evaporation* and *every* begin with the same sounds.

condensation [kahn•duhn•SAY•shuhn] the change of gas into a liquid

precipitation [pree•sip•uh•TAY•shuhn] water that falls from clouds to Earth's surface *Precipitation* and *prevent* begin the same way.

atmosphere [A•muhs•feer] the mixture of gases that surround Earth

water cycle [WAW•ter SY•kuhl] the process through which water moves between Earth's surface and the atmosphere

run-off [RUHN awf] water that cannot soak into the ground and instead flows across Earth's surface When you think of *run-off*, think of rain.

weather [WETH•er] what the atmosphere is like at a given time and place

anemometer [an•uh•MAHM•uh•ter] a tool for measuring wind speed

barometer [buh•RAHM•uh•ter] a tool for measuring air pressure

humidity [hyoo•MID*uh•tee] the amount of water vapor in the air

air pressure [AIR PRESH•uhr] the weight of the atmosphere on Earth's surface

wind [WIND] moving air

air mass [AIR MAS] a large body of air with the same temperature and moisture properties throughout

front [FRUHNT] the boundary between two air masses

weather map [WETH•er MAP] a map that uses symbols to show weather data

climate [KLY•mit] the long-term weather patterns of a place

climate zone [KLY•mit ZOHN] an area that has similar average temperatures and precipitation throughout

Equator [ee•KWAY•ter] the imaginary line that divides Earth into its northern and southern hemisphere, or halves

latitude [LAT•uh•tood] a measure of how far north or south a place is from the equator

Unit 3 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Water is constantly moving between Earth's surface and the atmosphere in the water cycle.
2. Water on Earth's surface evaporates or changes to water vapor, a gas in the atmosphere.
3. When water vapor rises, it cools and condenses around tiny bits of dust and salt.
4. Together, billions of droplets form a cloud; fog is a cloud that forms close to the ground.
5. Water droplets in a cloud join together until they are too heavy to stay in the air.
6. Rain, snow, and hail are kinds of precipitation, water that falls from clouds to Earth's surface.
7. Groundwater is rain that seeps into the ground and remains stored there.
8. Run-off, water that cannot soak into the ground, flows downhill into low-lying areas.
9. Precipitation may become part of a glacier, a large, slow-moving sheet of ice.
10. Aquifers, like the Floridan Aquifer, are huge bodies of rock that store water for people to use.
11. Meteorologists study weather, or what the atmosphere is like at a given time and place.
12. A wind vane measures the direction of wind; an anemometer measures the speed of wind.
13. A barometer measures air pressure; a hygrometer measures humidity.
14. Humidity is the amount of water vapor in the air.
15. The amount of water vapor in the air compared to what it could hold is the relative humidity.
16. Warmer air can hold more water vapor than cooler air.
17. Clouds are classified according to their shape and to how high above Earth they are.
18. Stratus clouds are low, gray clouds that signal rain; cumulus clouds look like cotton puffs.
19. Sleet is small bits of ice; snow forms when water vapor turns directly into a solid.
20. Hail forms as raindrops are blown high into a cloud where they freeze before they fall to Earth.
21. Air pressure is the pressure, or weight, of air pressing on Earth's surface.
22. In cold air, air particles are close together, and the air pressure is high.
23. In warm air, air particles are not as close together, and the air pressure is lower.
24. Wind blows from areas of high pressure to areas of low pressure.
25. Wind carries air masses from one place to another, often from west to east.
26. A front is the boundary, or place, where two air masses meet.
27. Meteorologists collect weather data from satellites, radar, and tools such as barometers.
28. A weather report is based on patterns that meteorologists find in the data they collect.
29. A hurricane forms in a low-pressure area over warm ocean water.
30. The center, or eye, of a hurricane is calm, but winds around the eye are extremely strong.
31. Weather may change from day to day, but climate is a pattern over a long period of time.
32. Three of Earth's climate zones (areas with similar climates) are tropical, temperate, and polar.
33. Polar climate zones, which are farthest from the equator, are cold all year round.
34. Tropical climate zones, which are nearest the equator, are hot all year round.
35. Most of the United States is in a temperate climate zone with mild temperatures.
36. These four things affect climate: distance from the equator, elevation, landforms, and water.
37. A mountaintop near the equator has a cool climate because of its elevation.
38. The ocean side of a mountain may have a wet climate, while the other side has a dry climate.
39. The Gulf Stream is a warm ocean current that flows past Florida and across the Atlantic.
40. The climate of an area affects the plants and animals that can survive there.
41. Air pressure is the pressure, or weight, of air pressing on Earth's surface.
42. In cold air, air particles are close together, and the air pressure is high.
43. In warm air, air particles are not as close together, and the air pressure is lower.
44. Wind blows from areas of high pressure to areas of low pressure.
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49. A hurricane forms in a low-pressure area over warm ocean water.
50. The center, or eye, of a hurricane is calm, but winds around the eye are extremely strong.

Unit 4-Science Words-Say each word quietly to yourself. Then read the meaning.

matter [MAT•er] anything that has mass and volume *Matter* and *mass* begin with the same sounds.

temperature [TEM•per•uh•cher] a measure of the energy of motion of the particles in matter

liquid [LIK•wid] a substance that has definite volume but does not have a definite shape

solid [SAHL•id] a substance with a definite shape and volume

gas [GAS] a substance that does not have a definite shape or volume

volume [VAHL•yoom] the amount of space something takes up

physical change [FIZ•ih•huhl CHAYNJ] a change in matter that does not affect the type of matter

chemical change [KEN•ih•kuhl CHAYNJ] a change in matter that results in a change in the identify of the matter

reaction [ree•AK•shuhn] the process in which new substances are formed during a chemical change

mixture [MIKS•cher] a combination of two or more substances that keep their identities

solution [suh•LOO•shuhn] a mixture that has the same composition throughout

atom [AT•uhm] the smallest part of a pure substance that has the properties of that substance

atomic theory [uh•TAHM•ik THEER•ee] a scientific explanation of the structure of atoms and how they interact with other atoms

element [EL•uh•muhnt] the type of matter made of just one kind of atom

compound [KAHM•pownd] a substance formed by at least two types of atoms that are chemically combined

Unit 4 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Matter cannot be created or destroyed, but it can change form from liquid to solid to gas.
2. You can observe physical properties of matter without changing the matter into something new.
3. Temperature—a measure of how fast particles in matter are moving—is a physical property.
4. Density— how much matter is in a specific volume—is a physical property.
5. To find the density of an object, divide the mass of the object by its volume.
6. Matter is made of tiny particles; the particles have energy and are always moving.
7. Particles in a solid vibrate close together, so the solid keeps its shape..
8. Particles in a gas have a lot of energy and are far apart, so a gas spreads out.
9. When water gives off energy, it cools and may change from a liquid to a solid, ice.
10. When water takes in energy, it heats up and may change from a liquid to a gas, water vapor.
11. Physical changes do not affect the type of matter being changed, but chemical changes do.
12. You can observe the physical properties of matter without changing the type of matter.
13. You cannot observe the chemical properties of matter without changing the matter.
14. A chemical change, such as rotting, results in a change in the type of matter.
15. Except for water, matter contracts when it heats up and expands when it cools down.
16. Water expands when it cools and becomes less dense, which is why ice floats in water.
17. The rate of change is how quickly a change in matter takes place.
18. More heat energy increases the rate of change, causing change to take place more quickly.
19. Food stays fresh in the refrigerator because low temperature slows the rate of change.
20. A low fever helps fight disease because the higher temperature kills harmful bacteria.
21. Everything that is part of a mixture keeps its own identity.
22. A carbonated drink is a mixture of water, a liquid, and carbon dioxide, a gas.
23. The matter in a mixture may not be spread evenly throughout the mixture.
24. A solution is a mixture in which the matter is spread evenly throughout.
25. A solution forms when one kind of matter dissolves in another kind of matter.
26. Some, but not all, solids dissolve in liquids.
27. Salt and sugar dissolve in water; rocks and sand do not dissolve in water.
28. Most solutions are made of two or more liquids, such as the liquids that make gasoline.
29. Gases can also form solutions, such as the different gases in air.
30. Physical properties can be used to separate the matter in mixtures.
31. An atom of something, such as silver, is the smallest particle of it that has all its properties.
32. Scientists' ideas about what atoms are made of and how they behave is their atomic theory.
33. Atoms, the building blocks of all matter, are made of protons, neutrons, and electrons.
34. An element is made up of just one kind of atom.
35. All atoms of an element have the same number of protons; no other element has that number.
36. There are more than 100 elements.
37. A compound is two or more types of atoms that have gone through a chemical change.
38. The properties of compounds are different from the properties of the elements that form them.
39. Water is a compound of two hydrogen atoms and one oxygen atom.
40. Salt is a compound of sodium atoms and chorine atoms.

Unit 5-Science Words-Say each word quietly to yourself. Then read the meaning.

energy [EN•er•jee] the ability to cause changes in matter
kinetic energy [kih•NET•ik EN•er•jee] the energy an object has because of its motion
potential energy [poh•TEN•shuhl EN•er•jee] the energy an object has because of its position or condition
mechanical energy [muh•KAN•ih•kuhl EN•er•jee] the total energy of motion and position of an object
electrical energy [uh•LEK•trik•uhl EN•er•jee] energy caused by the movement of electric charges
chemical energy [KEM•ih•kuhl EN•er•jee] energy that is stored in matter and that can be released by a chemical reaction
static electricity [STAT•ik ee•lek•TRIS•uh•tee] a build up of electrical charges
electric current [uh•LEK•trik KER•uhnt] the flow of electric charges
electric motor [uh•LEK•trik MOHT•er] a device that converts electrical energy into mechanical energy
electromagnet [ee•lek•troh•MAG•net] a device in which current produces magnetism
generator [JEN•er•ayt•er] a device that converts kinetic energy to electrical energy

Unit 5 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Energy is never used up; it just changes from one form to another.
2. Potential energy is the energy an object has because of its position or condition.
3. The energy in a stretched rubber band is stored as potential energy.
4. When the rubber band is released, potential energy changes to kinetic energy.
5. Sound energy is a type of kinetic energy because particles of air are vibrating, or moving.
6. Thermal (heat) energy is the kinetic energy of the particles that make up matter.
7. You see objects when light energy reflects off them and enters your eyes.
8. Electrical energy changes to other forms of energy we use, such as sound and heat energy.
9. Mechanical energy is the sum of kinetic energy plus potential energy.
10. Chemical energy is released by a chemical reaction, such as your body breaking down food
11. Electric charge is a property of a particle that affects how it behaves around other particles.
12. Protons have a positive charge; electrons have a negative charge; neutrons have no charge.
13. Atoms with the same number of protons and electrons have no charge.
14. An atom that gains an electron has a charge of -1; an atom that loses an electron becomes +1.
15. Electrons move between things that touch each other, such as between a carpet and your shoes.
16. Objects with opposite charges attract one another, like clothes coming out of a dryer.
17. Objects with like charges push away from one another, like strands of hair after you brush it.
18. Static electricity is the build up of electric charges in an object.
19. An electrostatic discharge is when electrons jump between objects with opposite charges.
20. Electric current, which flows along a wire, can do useful things like light rooms and cook food.
21. Electrical appliances change electrical energy into sound, thermal, and mechanical energy.
22. An electric heater changes electrical energy into thermal energy.
23. A lamp changes electrical energy into light energy.
24. An electric motor changes electrical energy into mechanical energy.
25. Wrapping a coil of electrical wire around an iron nail makes the nail a magnet.
26. When electric current flows, the nail will pick up small objects made of iron.
27. A device in which electric current produces magnetism is an electromagnet.
28. Electromagnets are used in electric motors, telephones, doorbells, and computers.
29. Generators change kinetic energy into electrical energy, which powers homes and businesses.
30. 1Huge electromagnets separate iron and steel objects from other objects in a junk yard.
31. Coal, a nonrenewable resource, is burned to heat the water that runs most generators.
32. Coal will run out over time, so it important to use electricity carefully.

Unit 6-Science Words-Say each word quietly to yourself. Then read the meaning.

insulator [IN·suh·layt·er] a material that does not allow electricity to flow
conductor [kuhn·DUHK·ter] a material that allows electricity to flow
circuit [SER·kit] a path that starts and finishes at the same place
series circuit [SIR·eez SER·kit] an electrical circuit with only one path for electricity
parallel circuit [PAIR·uh·lel SER·kit] an electrical circuit with more than one path for electricity

Unit 6 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. A circuit is a path that starts and finishes at the same place.
2. An electrical circuit is the path electricity follows.
3. Materials allow electricity to flow through them are conductors.
4. Most metals are conductors.
5. Materials that do not allow electricity to flow through them are insulators.
6. Rubber and plastic are insulators.
7. In a series circuit, electricity follows only one path.
8. In a parallel circuit, electricity follows more than one path.
9. A light bulb may be part of an electrical circuit.
10. A bulb does not light if the circuit is broken.

Unit 7-Science Words-Say each word quietly to yourself. Then read the meaning.

force [FAWRS] a push or a pull
friction [FRIK•shuhn] a force that opposes motion
gravity [GRAV•ih•tee] a force of attraction between two objects
balanced forces [BAL•uhnst FAWRS•uhz] forces on an object that are equal in size and opposition in direction
unbalanced forces [uhn•BAL•uhnst FAWRS•uhz] forces that cause a change in motion

Unit 7 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Forces can cause an object to start moving, slow down, stop moving, or change direction.
2. A spring scale is the tool used to measure forces in newtons.
3. Gravity pulls objects toward each other; objects with greater mass have a greater pull.
4. Friction acts against motion in objects that are touching each other.
5. Balanced forces are forces on an object that are equal in size and opposite in direction.
6. Forces are unbalanced when one force is greater than another.
7. Unbalanced forces cause a change in motion.
8. When one cue ball hits another, the force transfers and causes the second cue ball to move.
9. The more force applied to an object, the faster its acceleration is.
10. The less mass an object has, the less force is needed to change its motion.

Unit 8-Science Words-Say each word quietly to yourself. Then read the meaning.

organism [AWR•guh•niz•uhm] a living thing made up of parts that work together to meet its needs

organ [AWR•guhn] a body part that is made up of smaller parts that work together to do a certain job

organ system [AWR•guhn SIS•tuhm] a group of organs that work together to do one type of job

brain [BRAYN] the organ that processes information

skin [SKIN] a protective layer that covers the body

bones [BOHNZ] organs that protect and support the body and store minerals

muscles [MUHS•uhls] organs that contract to produce movement in the body

exoskeleton [ek•soh•SKEL•uh•tuhn] a hard outer covering

lungs [LUHNGZ] the main organs of the respiratory system

heart [HART] a muscular organ that pumps blood throughout the body

stomach [STUHM•uk] a muscular bag that mashes food into a liquid and mixes the food with digestive juices

liver [LIV•er] the organ that breaks large blobs of fat into tiny droplets so that the fats can be broken down more easily.

pancreas [PAN•kree•uhs] the organ that makes juices that are released into the small intestine. The juices break down fats and proteins into small pieces that can be absorbed.

kidneys [KID•neez] organs that remove waste from the blood *Kidneys* and *clean* begin with the same sound.

bladder [BLAD•er] the organ that stores urine and then releases it from the body

Unit 8 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. The eye is an organ because it has small parts that work together to let you see.
2. The roots, stems, and leaves of a plant are plant organs.
3. Your brain is the information center of your body; it sends and receives information constantly.
4. Your spinal cord, a rope of nerves along your backbone, is the main pathway for information.
5. Your five senses send information to your brain about the world around you.
6. All organisms have body parts that let them sense the world.
7. Skin, nails, and hair form a protective covering for your body.
8. Skin keeps germs out and helps keeps your body cool; hair helps keep your body warm.
9. Fur, feathers, scales, and shells are protective coverings for animals.
10. Bark is a protective covering for trees; sharp spines and a waxy coating protect some plants.
11. Bones protect and support the body and store minerals.
12. The place where two or more bones meet is called a joint.
13. Muscles, organs that contract and produce movement, often work in pairs.
14. An exoskeleton is a hard outer layer, like the covering of a cicada.
15. Your respiratory system takes oxygen from the air and gives off carbon dioxide.
16. Air flows through a tube, called the trachea, to your lungs, the main respiratory organ.
17. The trachea branches into two tubes; one tube goes into each lung and then branches again.
18. An asthma attack may take place if pollen or pollution causes the tubes, or bronchi, to swell.
19. Your heart, your blood vessels, and your blood make up your circulatory system.
20. Arteries are blood vessels that carry blood away from your heart; veins carry blood back.
21. Food passes down the esophagus to the stomach, where it is mashed and mixed with juices.
22. The liver makes bile, a juice that helps break down large blobs of fat into tiny droplets.
23. The pancreas releases juices that break fats and proteins into bits the body can absorb.
24. Using juices from the pancreas, the small intestine absorbs nutrients the body needs.
25. Solid waste passes out of the body through the large intestine.
26. Calories are a measure of how much energy your body will get from your food.
27. The body uses carbohydrates, proteins, and fats for energy.
28. The liver converts ammonia, a waste product when protein is broken down, to urea.
29. The kidneys clean the blood, and send urine to the bladder where it leaves the body.
30. 1In humans, the male reproductive cells are in the testes; the female cells are in the ovaries.

Unit 9-Science Words-Say each word quietly to yourself. Then read the meaning.

environment [en•VY•ruhn•muhnt] all the living and nonliving things in nature

ecosystem [EE•kih•sis•tuhm] a community of living things and the nonliving things around them

pollution [puh•LOO•shuhn] any harmful substance that gets into the environment

conservation [kathn•ser•VAY•shuhn] protecting ecosystems and the organisms living in them

extinction [ek•SINGK•shuhn] when all the members of a certain kind of living thing die

Unit 9 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Living things interact with one another and with nonliving things in the environment.
2. An ecosystem is a community of living things and the nonliving things around them.
3. Floods, earthquakes, volcanic eruptions, and droughts can change the environment quickly.
4. Animals, such as beavers building beaver dams, cause changes in the environment.
5. Human activities, such as habitat destruction, can be harmful to the environment.
6. Habitat destruction takes place when the trees in an area are cut down.
7. Pollution can kill living things and cause disease.
8. Conservation is when people work to protect the environment and the living things in it.
9. Some living things change because their environment changes.
10. Some dinosaurs became extinct, or died out, when the environment cooled.

Unit 10-Science Words-Say each word quietly to yourself. Then read the meaning.

habitat [HAB•i•tat] the place where a living thing lives
adaptation [ad•uhp•TAY•shuhn] a characteristic that helps living things survive
instinct [IN•stinkt] behaviors that animals know how to do without being taught
grassland [GRAS•land] a habitat in which grasses are the main plant life
desert [DEHZ•ert] a habitat that receives very little rain
taiga [TY•guh] a far northern habitat with very cold winters, and short warm summers
polar [POH•ler] habitats that are near the North and South Pole
wetland [WET•land] an area of land covered by a shallow layer of water for most of the year
intertidal zone [ihn•ter•TYD•uhl ZOHN] a place where the ocean meets the coast

Unit 10 Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. A living thing must be able to meet all its needs within its habitat.
2. Only certain kinds of living things can live in certain habitats; a fish needs a water habitat.
3. Plants and animals have adaptations that help them survive in their habitats.
4. The arctic hare's thick fur is an adaptation that keeps it warm in the cold habitat where it lives.
5. Physical adaptations are differences in the bodies of plants and animals.
6. Thorns, sharp teeth, and camouflage that keep an animal hidden, are physical adaptations.
7. Instincts, or behaviors that animals do without being taught, are behavioral adaptations.
8. Migration, moving to different locations at certain times of the year, is an instinct.
9. Hibernation, a long period when an animal's body processes slow down, is an instinct.
10. Tadpoles and frogs do not compete because they live in different places; this is an adaptation.
11. Temperate forests have warm summers and cold winters.
12. Most trees in temperate forests lose their leaves in fall.
13. Tropical rain forests are warm and rainy all year.
14. Plants on the floor of tropical rain forests are adapted to low light.
15. Grasslands receive less rain than forests, which is why few trees grow there.
16. Energy stored in the large roots of the grasses helps them grow back quickly after a fire.
17. A desert gets very little rain, which makes it hard for living things to survive.
18. Cactuses and other desert plants have thick bodies and waxy leaves that store water.
19. Pine trees and other evergreens are adapted to the cold taiga habitat.
20. Polar habitats near the North and South Pole have winter-like conditions all year long.
21. Lakes and ponds are fresh water habitats where many plants grow near the shore.
22. Only floating plants grow in the open-water zone; no plants grow in the deep-water zone.
23. The water in lakes and ponds is mostly still; the water in rivers and streams flows.
24. The faster the water flows, the harder it is for living things to survive.
25. Bogs, swamps, and marshes are wetlands, or land covered by a shallow layer of water.
26. Wetlands are home to many kinds of birds and resting places for migrating birds.
27. The intertidal zone is the place where the ocean meets the coast.
28. The intertidal zone is underwater during high tide and bashed by waves at other times.
29. Plants in the intertidal zone have parts that hold to rocks so they don't get washed away.
30. Light reaches the upper, or photic, zone of the ocean; light does not reach the lower, aphotic