

NextGen
Science

Glossary

attract (v) L #107

pull toward

air pressure (n) L #79

the atmosphere pressing down on an area

anemometer (n) L#79

a tool that measures wind speed

atmosphere (n) L #79

a layer of gases that covers Earth and controls temperature; the place where weather happens

balanced forces (n) L #103

a condition in which forces are the same size and going in opposite directions; when forces are balanced an object at rest will not move, a moving object will continue to move in the same way

barometer (n) L #79

a tool that measures air pressure

behavior (n) L #17

the way a living thing acts

body fossil (n) L#56

a trace of a living thing, such as a shell, bone, or tooth

brain (n) L #13

the control center; part of an animal's body that receives messages and sends signals to other body parts

brainstorming (n) L #51

a way to come up with many ideas or solutions by listing ideas one after another without stopping to discuss them, often done with a group of people

carbon dioxide (n) L#6

a gas in the air that green plants must have in order to make food

carnivore (n) L#9

an animal that eats other animals

chrysalis (n) L#26

the pupa stage of a butterfly or moth

climate (n) L#83

the typical, or most common, weather patterns in an area over many, many years

collide (v) L#106

touch, bump, or crash into, causing a change in the motion and/or shape of the object(s)

colony (n) L #39

a group of living things of the same species living together

composting (v) L #73

letting plants break down and return their nutrients back to the soil

conservation (n) L#46

the actions people take to protect ecosystems and wildlife (the environment)

constraint (n) L#49

a limitation; something that creates a challenge

contact (n) L #107

touching

contact forces (n) L #107

forces that work only when objects are touching; results from a push, a pull, or friction

continent (n) L#64

a large area of land; one of seven on planet Earth

criteria (n) L#49

a feature that is needed or wanted; a requirement

dam (n) L #47

a structure built across a river that changes the way the water naturally moves

deforestation (n) L#46

the destruction of a forest

direction (n)

the way in which something is moving

ecosystem (n) L#43

the place where an organism lives and gets what it needs to survive; includes all the living and nonliving things that interact with it

egg (n) L #19

beginning of an animal's life cycle

electricity (n) L #108

a form of energy that comes from the flow of tiny particles

energy (n)

the ability to do work; all energy comes from the sun

engineer (n) L#48

a person who does problem-solving, planning, and creating

engineering (n) L#48

the science of problem-solving, planning, and building

engineering design process (n) L #51

a multi-step process that engineers use to solve problems

environment (n) L #7

the world around us, including everything living and non-living

environmental impact (n) L #73

a helpful or harmful way in which humans change the environment

equator (n) L#82

an imaginary line on Earth, midway between the North Pole and the South Pole; area that receives direct light from the sun and is warm all year round

erosion (n) L#62

the movement of soil and rock from one place to another by water or wind

evacuation (n) L#87

the removal of people from danger, often using the plan a city has in place for emergencies

extinct (adj) L#54

no longer existing; describes a species whose members have all died

force (n) L #98

a push or pull

forecast (v) L #79

predict the weather by making observations and studying patterns

fossil (n) L #54, 56

a record of a living thing from the past; a trace or remain of an organism that lived at least 10,000 years ago

freshwater (n) L#67

the type of water in most lakes, rivers, streams, ponds, wetlands, and underground; water that is not salty

friction (n) L#99

a force that stops or slows down objects when objects come in contact with one another

germination (n) L #21

the changes that a plant goes through as it grows from a seed to a seedling

glacier (n) L#67

a large body of moving ice that shapes Earth's surface

gravity (n) L#99

a force that pulls objects toward each other

group behavior (n) L #39, 41

what animals do and how they act together in order to survive and reproduce

habitat (n) L#2

the place where an organism lives

heat (n) L #97

a form of energy that can change matter

herbivore (n) L#9

an animal that eats only plants

hibernation (n) L #23

a time when animals stay in a safe place and are inactive in order to survive harsh winter weather

humidity (n) L #79

the amount of wetness in the air

hygrometer (n) L #79

a tool that measures humidity

impact (v) L#68

cause change; create an affect on something

inherit (v) L#27

receive from a parent

instinct (n) L#32

behavior an organism is born with and knows without being taught

landfill (n) L #76

an area where trash and garbage are buried between layers of earth

landform (n) L#64

a natural feature on Earth's surface, such as a valley, hill, mountain, or canyon

larva (n) L #26

a stage during metamorphosis; the newly-hatched animal (caterpillar, maggot, tadpole)

learned trait (n) L#32

behavior an organism is not born with but must be taught

life cycle (n) L#19

the series of changes an organism goes through as it grows and changes: birth, growth, reproduction, and death

lifespan (n) L#2

the amount of time between an organism's birth and death

light (n) L#6, 91

a kind of energy plants need to make food

liquid (n) L#67

a form of matter that takes the shape of its container

map (n) L#64

a model of Earth that can show the shape, size, and location of landforms and water bodies

matter(n) L#93

anything that takes up space

mature (adj) L#18

fully grown; able to reproduce

metamorphosis (n) L#24

the process some organisms go through to become adults, includes a series of changes from egg to larva to pupa to adult

meteorologist (n) L#84

a scientist who studies weather and its patterns

migrate (v) L#42

move or travel to a new area at certain times of the year

moon (n) L #57

a space object that rotates around Earth and reflects the light of the sun

motion (n) L #101

movement affected by forces

natural hazard (n) L#86

a danger that occurs in nature, such as an earthquake, flood, hurricane, or wildfire

natural resource (n) L #72

an item found in, on, or around the Earth, for example, air, water, soil, plants, animals, and coal

nonliving (adj) L#1

describes an object that cannot make more of its own kind and does not need food, water, or air, for example, buildings, plastics, steel

nutrient (n) L#3

what organisms need to live, grow, and be healthy, for example, vitamins, minerals, proteins, etc.

offspring (n) L#2

the baby or child of a living thing

omnivore (n) L#9

an animal that eats both plants and animals

organism (n) L#2

a living thing

oxygen (n) L#4

one of Earth's building blocks that is necessary for life

pattern (n) L #58, 59, 81

a repeated movement or design; things occurring in the same order or predictable way, such as the seasons

physical trait (n) L #28

a visible feature, such as eye color, skin color, height, or type of hair

pollen (n) L#16

a powder that plants use to make seeds

pollination (n) L #21

the process in which insects, animals, or wind spread pollen from one flower to another

pollution (n) L #73

waste that harms water, air, or land; a harmful impact caused by humans

precipitation (n) L#77

water that falls to the ground as rain, snow, sleet, hail, or mist; one of four factors that make up weather

predator (n) L #17

an animal that hunts other animals for food

process (n)

a set of steps that lead to a result

property (n) L#94

a characteristic that describes matter, such as color, size, shape, or weight

pull (n) L#98

a force that brings an object toward you

pupa (n) L #26

a stage of metamorphosis; happens in an enclosed case, such as a cocoon

push (n) L #98

a force that moves an object away from you

rain gauge (n) L#79

a tool that collects and measures liquid precipitation

recycle (v) L #76

break down or change in some way; produce useful materials from waste or discarded items

reflected (adj) L#91

thrown or bounced back

repel (v) L #107

push away

reproduce (v) L #18

make more of one's own kind; create offspring

reproduction (n) L#18

process an organism uses to make more of its own kind

reverse (v) L#97

change back; move in the opposite way

roots (n)

the part of a plant that grows underground, holds the plant in the soil, and soaks up water and other nutrients to feed the plant

saltwater (n) L#67

water containing salt; ocean water

scientist (n) L#48

a person who observes and studies the world, asks questions, researches, and looks for answers

season (n) L#58

a division of the year that has particular patterns in its weather and amount of daylight; spring, summer, fall, winter

seedling (n) L#6

a young plant; sapling

severe weather (n) L#84

extreme condition, such as a thunderstorm, blizzard, hurricane, or tornado

shadow (n) L#92

the dark area formed when an object blocks a light source; appears opposite the side that light is shining on

shelter (n) L#4

a safe place that protects organisms from weather and other organisms

signal (n) L#13

a message; something that sends information

size (n)

how big or small something is

soil (n) L #3

the layer of Earth's surface that plants grow in; a mixture of rock particles, decayed plants and animals, air, and other material

solid (n) L #67, 93

a form of matter that has a definite shape and takes up a definite amount of space

sound (n) L#89

a form of energy that travels in waves and can be heard but not seen; made when objects vibrate

species (n) L#18

the whole group of a certain kind of organism

sprout (v) L#6

grow from a seed

static electricity (n) L #108

an electrical charge caused by friction

stem (n) L #11

the part of a plant that holds it upright and carries nutrients to the plant's leaves and flowers

sun (n) L #57

a big ball of gas; a star that gives off light

sunshine (n) L #78

light from the sun; one of four factors that make up weather

survive (v) L#3

live; stay alive

temperature (n) L #77

how hot or cold something is; one of four factors that make up weather

thermometer (n) L #77, 79

a tool that measures temperature

threat (n) L#17

a danger; something that can cause harm

trace fossil (n) L#56

an imprint of a living thing from the past, such as a leaf print, toothmark, or footprint left in a rock

trait (n) L #27, 31, 32

characteristic; any feature that describes an organism

unbalanced forces (n) L #103

a condition in which forces are not equal, resulting in a change in motion

variation (n) L#29

differences among individuals

vibrate (v) L#89

move back and forth very quickly

volume (n) L#67

the amount something can hold

water body (n) L#64

a natural feature on Earth's surface containing water, such as an ocean, lake, or river

weather (n) L#77

what the air is like outdoors at a certain time in a certain place; made up of temperature, precipitation, sunshine, and wind

weathering (n) L#62

a condition that occurs when wind or water break up and wear away rock and land

wind (n) L #78

moving air; one of four factors that make up weather

wind sock (n) L #79

a tool that shows the direction of the wind