

Week 1

Accurate- Very close to the actual value

adaptation- a characteristic of an organism that increases its chance of survival in its environment

air mass- A large body of air that has similar temperature and humidity throughout

air pressure- The weight of the atmosphere pressing down on Earth

anemometer- A weather instrument that measures wind speed

Week 2

asteroid- A chunk of rock or iron less than 1,000 km (621 mi) in diameter that orbits the sun

astronomy- The study of objects in space and their properties

atmosphere- the layers of gas that surround the Earth, other planets, or stars

atom- The smallest unit into which an element can be divided and still retain all the properties of that element

atomic theory- A scientific explanation of the structure of atoms and how they interact with other atoms

Week 3

axis- the imaginary line on which the Earth rotates

Balance- A tool used to measure the amount of matter in an object, which is the object's mass

balanced forces- Forces that cancel each other out because they are equal in size and opposite in direction

barometer- A weather instrument used to measure air pressure

bioengineering- The application of the engineering design process to living things

Week 4

biotechnology- A product of technology used to benefit organisms and the environment

bladder- Organ in the excretory system that stores and releases urine

bone- A hard organ that has a spongy layer inside and that may help support the body or protect other organs

brain- The organ in the human body that processes information

carnivore- an animal or plant that consumes or obtains nutrients from animals

Week 5

change of state- a physical change that occurs when matter changes to another state

Chemical Change- A change in one or more substances, caused by a reaction, that forms new and different substances

Chemical Energy- Energy that is stored in matter and that can be released by a chemical reaction

circuit- A path along which electric charges can flow

climate- The pattern of weather an area experiences over a long period of time

Week 6

climate zone- An area that has similar average temperatures and precipitation throughout

comet- A chunk of frozen gases, rock, ice, and dust orbiting the sun

community- all the populations of organisms belonging to different species and sharing the same geographical area

compound- a substance made up of a combination of two or more elements held together by chemical bonds that cannot be separated by physical means

condensation- The process by which a gas changes into a liquid

Week 7

conductor- A material that readily allows electric charges to pass through it and therefore carries electricity well

conservation- controlled use and/or maintenance of natural resources; various efforts to preserve or protect natural resources

constellation- a star pattern identified and named as a definite group

consumer- an organism that feeds on other organisms for food

control- The experimental setup to which you will compare all the other setups

Week 8

criteria- The standards for measuring success

decomposer- any organism that feeds or obtains nutrients by breaking down organic matter from dead organisms

density- mass per unit volume of a substance in a given area

deposition- the process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area

desert- An area of land that is very dry

Week 9

dwarf planet- A nearly round body, slightly smaller than a planet, whose orbit crosses the orbit of another body

earthquake- the shaking of the ground caused by the sudden release of energy in Earth's crust

ecosystem- A community of organisms and the environment in which they live

electric current- The flow of electric charges along a path

electric motor- A device that changes electrical energy into mechanical energy

Week 10

electrical energy- Energy caused by the movement of electric charges

electromagnet- A device in which electric current is used to produce magnetism

element- Matter that is made of only one kind of atom

energy- The ability to cause changes in matter

energy pyramid- a pyramidal diagram that compares the amount of energy available at each position, or level, in the feeding order

Week 11

energy transfer- a change of energy from one form to another (e.g., mechanical to electrical, solar to electrical)

engineering- The use of science and math for practical uses such as the design of structures, machine, and systems

environment- All the living and nonliving things that surround and affect an organism

equator- An imaginary line around Earth, equally distant from the North and South Poles

erosion- the wearing away of Earth's surface by the breakdown and transportation of rock and soil

Week 12

evaporation- The process by which a liquid changes into a gas

evidence- Information collected during a scientific investigation

exoskeleton- A hard outer covering, found in many types of animals, that supports and protects the body

experiment- A procedure carried out under controlled conditions to test a hypothesis

extinction- The death of all the organisms of a certain kind of living thing

Week 13

food chain- transfer of energy through various stages as a result of feeding patterns of a series of organisms

food web- the interconnected feeding relationships in a food chain found in a particular place and time

force- a push or a pull

fossil- a whole or part of a plant or animal that has been preserved in sedimentary rock

friction- A force that acts between two touching objects and that opposes motion

Week 14

front- the border where two air masses meet

fulcrum- the pivot point of a lever

galaxy- A group of billions of stars, objects that orbit those stars, gas, and dust

gas- one of the fundamental states of matter in which molecules do not have fixed volume or shape

generator- A device that makes an electric current by converting kinetic energy to electrical energy

Week 15

grassland- An area of land covered mostly with grasses that generally receives less rain than a forest

gravitation- a force of attraction between two masses

gravity- The force of attraction between two objects, such as the attraction between Earth and objects on it

groundwater- Water that is stored underground.

habitat- a place in an ecosystem where an organism normally lives

Week 16

heart- A muscular organ that pumps blood through the rest of the circulatory system

heat- a form of energy resulting from the temperature difference between a system and its surroundings

herbivore- an animal that feeds on plants

humidity- The amount of water vapor in the air

igneous rock- a type of rock that forms from molten or partly molten material that cools and hardens

Week 17

inclined plane- a type of simple machine; a slanted surface that makes it easier to move a mass from a lower to a higher point

inertia- the property of a body, due to its mass, that causes it to resist any change in its motion unless overcome by a force

instinct- A behavior that an organism inherits and knows how to do without being taught

insulator- A material that resists the flow of electric charge and therefore does not conduct electricity well

intertidal zone- The area between the land and the ocean that is covered by water at high tide and uncovered at low tide

Week 18

investigation- A procedure carried out to carefully observe, study, or test something in order to learn more about it

kidneys- Organs in the human excretory system that remove waste materials from the blood

kinetic energy- The energy an object has because of motion

latitude- A measure of how far north or south a place is from the equator

lever- type of simple machine; consists of a rigid bar that pivots about a fulcrum, used to transmit and enhance power or motion

Week 19

life cycle- the entire sequence of events in an organisms growth and development

light- electromagnetic radiation that lies within the visible range

liquid- one of the fundamental states of matter with a definite volume but no shape

liver- A large organ that makes a digestive juice called bile

lungs- The largest organs in the respiratory system that bring oxygen from the air into the body and release carbon dioxide

Week 20

magnetic- having the property of attracting iron and certain other materials by virtue of a surrounding field of force

mass- the amount of matter an object contains

matter- a solid, liquid, or gas that possesses inertia and is capable of occupying space

mechanical energy- The total energy of motion and position of an object

metamorphic rock- a type of rock that forms from existing rock because of extreme changes caused by heat, pressure, or chemical environments

Week 21

microscopic- relating to an object too small to be visible without the use of a microscope

mixture- A combination of two or more different substances in which the substances keep their identities

molecule- A single particle of matter made up of two or more atoms joined together chemically.

moon- a natural satellite that revolves around a planet

moon phases- a phase that indicates the fraction of the Moon's disc that is illuminated; the eight moon phases: new moon, waxing crescent, first quarter, waxing gibbous, full moon, waning gibbous, last quarter, waning crescent

Week 22

muscle- An organ made of bundles of long fibers that can contract to produce movement in living things

nonrenewable energy- resource a resource that can only be replenished over millions of years

opinion- A personal belief or judgment that does not need to be backed up with evidence

organ- A body part that is made of smaller parts that work together to do a certain job

organ system- A group of organs that work together to do a job for the body

Week 23

organism- any living plant, animal, or fungus that maintains various vital processes necessary for life

pancreas- An organ that makes a digestive juice and insulin

parallel circuit- An electric circuit that has more than one path for the electric charges to follow

photosynthesis- a chemical process by which plants trap light energy to convert carbon dioxide and water into carbohydrates (sugars)

physical change- A change in which the form or shape of a substance changes but the substance still has the same chemical makeup

Week 24

planet- a large body in space that orbits a star and does not produce light of its own

polar- Near Earth's North Pole or South Pole

pollution- A waste product that harms living things and damages an ecosystem

population- a group of organisms of the same species living in a specific geographical area

potential energy- Energy that an object has because of its position or its condition

Week 25

precipitation- Water that falls from the air to Earth's surface

predator- an organism that preys on and consumes animals; usually an animal

prey- an organism caught or hunted for food by another organism

producer- an organism that makes its own food from the environment; usually a green plant

protest- unicellular organisms belonging to the kingdom Protista

prototype- The original or test model on which a product is based

Week 26

pulley- a type of simple machine; a circular lever, usually a wheel with a groove where a rope can be placed and used to change the direction of a force

reaction- The process in which new substances are formed during a chemical change

reflection- the bouncing of or turning back of light, sound, or heat from a surface

renewable resource- a resource that is replaced as it is used, by natural processes in a reasonable amount of time

Week 27

resource- any material that can be used to satisfy a need

runoff- Water that does not soak into the ground and that flows across Earth's surface

science- The study of the natural world through observation and investigation

scientific method- a plan of inquiry that uses process skills as a tool to gather, organize, analyze, and communicate information

sedimentary rock- rock formed from layers of sediment that overlay and squeeze together or are chemically combined

Week 28

series circuit- An electric circuit in which the electric charges have only one path to follow

skin- The human body's largest organ, which covers the outside of the body

solar system- a star and all the other planets that orbit it

solid- having a definite shape and a definite volume; one of the fundamental states of matter

solution- a mixture of two or more substances uniformly dispersed throughout a single phase

Week 29

spring scale- A tool used to measure forces

star- A huge ball of very hot, glowing gases in space that produces its own light and heat

static electricity- The buildup of electric charges on an object

stomach- A baglike organ in which food is mixed with digestive juices and squeezed by muscles

Sun- the closest star to Earth and the center of our solar system

Week 30

system- a set of objects, organisms, or different parts acting to form a whole

taiga- Land that is very cold in winter and that is covered mostly with conifers

technology- The use of scientific knowledge to solve practical problems

temperature- The measure of the energy of motion in the particles of matter, which we feel as how hot or cold something is

tissue- similar cells acting to perform a specific function; four basic types are muscle, connective, nerve, and epidermal

Week 31

topography- the surface, shape, and composition of a land area

unbalanced forces- Forces that cause a change in motion because they act on an object and don't cancel each other out

universe- Everything that exists, including galaxies and everything in them

variable- Any condition that can be changed in an experiment

volcano- a vent or fissure in Earth's surface through which magma and its associated materials are expelled; generally a mountain-like structure

Week 32

volume- a measure of the amount of space an object takes up; also the loudness of a sound or signal

water cycle- the path water takes as it is being cycled through the environment, including condensation, evaporation, and precipitation

weather- What is happening in the atmosphere at a certain place and time

weather map- A map that uses symbols to show weather data

weathering- the natural processes that break down and change rock into soil, sand, and other materials; differs from erosion in that no transportation of those materials takes place

Week 33

wetland- An area of land covered with shallow water for most of the year

wheel and axle- a type of simple machine; a circular frame or disk revolving around a central axis

wind- Air that is moving