FCAT Science Vocabulary

Grade 5

atom	the smallest unit of a chemical element that can still retain the properties of that element
carnivore	an animal or plant that consumes or obtains nutrients from animals
community	all the populations of organisms belonging to different species and sharing the same geographical area
conservation	controlled use and/or maintenance of natural resources; various efforts to preserve or protect natural resources
consumer	an organism that feeds on other organisms for food
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
ecosystem	an ecological community, together with its environment, functioning as a unit
energy	a quantity that describes the capacity to do work; a source of usable power
energy pyramid	a pyramidal diagram that compares the amount of energy available at each position, or level, in the feeding order
energy transfer	a change of energy from one form to another (e.g., mechanical to electrical, solar to electrical)
environment	the sum of conditions affecting an organism, including all living and nonliving things in an area, such as plants, animals, water, soil, weather, landforms, and air
experiment	a procedure that is carried out and repeated under controlled conditions in order to discover, demonstrate, or test a hypothesis; includes all components of the scientific method
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
friction	a force that opposes the relative motion of two material surfaces in contact with one another

gravitation	a force of attraction between two masses
gravity	the observed effect of the force of gravitation
habitat	a place in an ecosystem where an organism normally lives
heat	a form of energy resulting from the temperature difference between a system and its surroundings
herbivore	an animal that feeds on plants
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
investigation	a procedure that is carried out in order to observe a response caused by a stimulus
kinetic energy	the energy possessed by a body because of its motion
life cycle	the entire sequence of events in an organisms growth and development
light	electromagnetic radiation that lies within the visible range
mass	the amount of matter an object contains
microscopic	relating to an object too small to be visible without the use of a microscope
nonrenewable resource	a resource that can only be replenished over millions of years
organ	a structure containing different tissues that are organized to carry out a specific function in the body (e.g., heart, lungs, brain, liver, etc.)
organism	any living plant, animal, or fungus that maintains various vital processes necessary for life
photosynthesis	a chemical process by which plants trap light energy to convert carbon dioxide and water into carbohydrates (sugars)
pollution	any alteration of the natural environment producing a condition harmful to living organisms; may occur naturally or as a result of human activities
population	a group of organisms of the same species living in a specific geographical area
potential energy	the energy an object has because of its position or structure; stored energy
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
reflection	the bouncing of or turning back of light, sound, or heat from a surface
refraction	a change in direction of a wave that occurs as it passes from one medium to another of different density
renewable resource	a resource that is replaces as it is used, by natural processes in a reasonable amount of time
resource	any material that can be used to satisfy a need
scientific method	a plan of inquiry that uses process skills as a tool to gather, organize, analyze, and communicate information
system	a set of objects, organisms, or different parts acting to form a whole
tissue	similar cells acting to perform a specific function; four basic types are muscle, connective, nerve, and epidermal

Grade 4

adaptation	a characteristic of an organism that increases its chance of survival in its environment
atmosphere	the layers of gas that surround the Earth, other planets, or stars
axis	the imaginary line on which the Earth rotates
change of state	a physical change that occurs when matter changes to another state
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
chemical change	a reaction or a change in a substance produced by chemical means that results in producing a different chemical
condensation	the process of changing from a gas to a liquid
constellation	a star pattern identified and named as a definite group
element	a substance that cannot be reduced to a simpler substance by chemical means
equator	an imaginary circle around Earth's surface located between the poles and a plane perpendicular to its axis of rotation that divides it into the Northern and Southern Hemispheres
evaporation	the process in which a liquid is converted to its vapor phase by heating the liquid

fossil	a whole or part of a plant or animal that has been preserved in sedimentary rock
galaxy	a large collection of stars, gases, and dust that are part of the universe bound together by gravitational forces
gravitation	a force of attraction between two masses
liquid	one of the fundamental states of matter with a definite volume but no shape
magnetic	having the property of attracting iron and certain other materials by virtue of a surrounding field of force
mixture	the product of a thorough blending of two or more substances, not chemically combined
moon	a natural satellite that revolves around a planet
moon phase	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
physical change	a reaction; a change in matter from one form to another, without forming new substances
planet	a large body in space that orbits a star and does not produce light of its own
solar system	a star and all the other planets that orbit it
solution	a mixture of two or more substances uniformly dispersed throughout a single phase
star	a large, gaseous, self-luminous body held together by gravity
Sun	the closest star to Earth and the center of our solar system
universe	the total sum of all matter and energy that exist
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

Grade 3

deposition	the process by which sediment is carried by forces (e.g., wind, rain, or water currents) and left in a certain area
earthquake	the shaking of the ground caused by the sudden release of energy in Earth's crust
erosion	the wearing away of Earth's surface by the breakdown and transportation of rock and soil
fulcrum	the pivot point of a lever
gas	one of the fundamental states of matter in which molecules do not have fixed volume or shape
igneous rock	a type of rock that forms from molten or partly molten material that cools and hardens
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
lever	a type of simple machine; consists of a rigid bar that pivots about a fulcrum, used to transmit and enhance power or motion
matter	a solid, liquid, or gas that possesses inertia and is capable of occupying space
metamorphic rock	a type of rock that forms from existing rock because of extreme changes caused by heat, pressure, or chemical environments
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
sedimentary rock	rock formed from layers of sediment that overlay and squeeze together or are chemically combined
solid	having a definite shape and a definite volume; one of the fundamental states of matter
topography	the surface, shape, and composition of a land area
volcano	a vent or fissure in Earth's surface through which magma and its associated materials are expelled; generally a mountain-like structure
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
wheel and axle	a type of simple machine; a circular frame or disk revolving around a central axis