



GLOSSARY

This glossary is a compilation of terms identified as pertinent to the Grade 7 Science Grade Level Expectations (GLEs). The identified terms found in this document came directly from the State of Alaska Science Performance Standards, Grade 7. Terms were defined with special consideration given to the context that it would be used in science instruction.

This glossary is meant to provide clarity for teachers, local school administrators, substitute teachers, teacher aides, and other school support staff. This glossary was not created with the intent to have it distributed to students.



Glossary

A

accelerate (4)

The change in speed of a moving object with respect to time.

amplitude (4)

The height of a sound wave, which determine its volume.

analyze (2)

1. To carefully examine a set of data
2. To observe an object's basic parts to find out what it is made of or what makes it work

asexual reproduction (5)

When an organism reproduces one or more copies of itself, i.e. fission or budding.

B

biological evolution (5)

The process by which the genetic structure of populations changes over time

boiling point (3)

The temperature at which a liquid becomes a gas

C

chemical change (6)

The process in which substances are changed into one or more different products.

classification (5)

A system by which objects are put in order so that they can be referred to again or identified.

classify (1)

To sort into groups according to their properties or patterns.

communicate (1)

To share information, data, or findings with others through written or spoken words, i.e. graphs, charts tables, diagrams, or pictures.



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compound (3)

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

condensation (8)

The process by which water vapor changes from a gas to a liquid, i.e. water vapor into water droplets.

conduct (2)

skillful guidance

conductivity (3)

The ability of a material to conduct heat or electricity.

consumer (6)

An organism requires complex organic compounds for food, so it feeds on other organisms for food.

creativity (9)

The ability to create or invent.

curiosity (9)

The desire to know or learn.

D

data (2)

Recorded observations from an experiment.

decomposer (6)

An organism eats dead or decaying matter.

density (3)

The amount of matter in a certain volume of a substance found by dividing the mass of an object by its

deposition (7)

The process of dropping off pieces of eroded rock.

describe (1)

To use words or pictures to show what is observed.

E

element (3)

One of the known chemical substances



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that cannot be broken down further without changing its chemical properties.

energy (6)

The ability to do work or cause change; it can be in many forms and can be converted from one form to another.

environment (2)

All external factors, living and non-living that affect an organism.

erosion (7)

The process of carrying away soil or pieces of rock, i.e. weathering, dissolution, abrasion, corrosion, and transportation, by mechanisms, i.e. gravity, wind, water, ice, plants, or animals.

evaluate (1)

To determine the value or worth by careful study.

evaporation (8)

The process of a liquid changing into a vapor or a gas.

F

food web (6)

A model that shows the complex feeding relationships by which energy and nutrients are transferred between organisms in a community.

force (4)

The push or pull exerted on an object.

freezing point (3)

The temperature at which a substance changes state from a liquid to a solid.

frequency (4)

1. The number of times an object vibrates per second.
2. The number of times an event or action occurs.

front (8)

The boundary between two air masses with different temperatures, density, and



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moisture.

G

gas (4)

A state of matter that has no definite shape or volume.

generalize (1)

To draw a general conclusion from.

genetics (5)

The study of how traits are inherited.

H

heat (3)

The kinetic movement of molecules in an object that cause an increase in temperature; thermal energy is transferred from a warmer object to a cooler object.

heredity (5)

The passing down of inherited traits from one generation to another.

history (2)

Chronological record of significant events.

I

identify (1)

1. To establish the identity of
2. To determine the taxonomic position or category of a specimen in the biological classification.

igneous rock (7)

A rock formed when magma or lava cools and hardens.

imagination (9)

Creativity; resourcefulness.

infer (1)

To make a conclusion from facts.

innovation (9)

A new idea, method, or device.

inquiry (2)

The examination into facts or assumptions (a fact or statement that is



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- taken for granted).
- interaction (2)** To act upon one another.
- investigate (2)** A series of carefully controlled steps designed to discover or support a hypothesis and can be replicated or repeated.
- K**
- knowledge (9)** Information or skills acquired through experiences or education.
- L**
- landform (7)** A physical feature on Earth's surface, i.e. mountain, hill, valley, plateau. Each landform has specific characteristics and is formed in a different way.
- life cycle (5)** A series of stages that occur during the lifetime of all organisms.
- light (3)** A form of electromagnetic energy that travels in waves through space and can be seen when it interacts with matter.
- liquid (4)** A state of matter that has a definite volume, but no definite shape.
- M**
- matter (3)** Anything that has mass and takes up space.
- measure (1)** To find the size, volume, mass, weight, or temperature of an object or how long an event occurs.
- metamorphic rock (7)** A rock that forms from another kind of rock under heat and pressure.
- mixture (3)** A physical combination of two or more substances that are blended together



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motion (4)

without forming new substances.

An object's change in position relative to a reference point.

mutation (5)

Any permanent change in a gene or chromosome of a cell.

N

natural selection (5)

1. The process by which the organisms that are best suited for their environment survive and pass on their traits.
2. A theory to explain the mechanism of evolution.

O

observation (1)

Any information that we gather by using our senses.

orbit (8)

The curved path followed by a planet, moon, or satellite as it revolves around an object.

organism (5)

Any living thing that can carry out its life processes on its own.

P

perspective (9)

A view or outlook.

physical change (6)

The process that changes a substance's form without producing a new substance.

precipitation (8)

Any form of water that falls from the atmosphere and reaches the ground, i.e. rain, snow, sleet, hail.



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predict (1)

To state possible results of an event or experiment based on past experiences or observations.

pressure system (8)

A region of the Earth's atmosphere where air pressure is low or high.

process (2)

A series of actions or operations that lead to an end.

producer (6)

Any organism that is able to make food through photosynthesis or chemosynthesis.

R

record (2)

To keep facts, information, and data in written form.

reforestation (7)

The action of renewing a forest cover by natural seeding or by the planting of young trees.

relationship (9)

The connection or association; the condition of being related.

S

science (9)

Knowledge about the natural world that is derived from observations and experiments.

sedimentary rock (7)

A type of rock that often contains fossils, and is formed when layers of sand, silt, clay or mud are

sexual reproduction (5)

The form of reproduction by the joining of a male reproductive cell with a female reproductive cell.

society (9)

A group of organisms of the same species that live and work together in an organized way, with each member doing



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- a specific job.
- solar system (8)** A star with a group of celestial bodies orbiting it.
- solid (4)** A state of matter that has definite shape and volume.
- star (8)** An object in space that produces its own energy, including heat and light.
- structure (6)** The arrangement or relationship of parts of organs in an organism.
- sublimation (8)** The process of changing directly from a solid to a gas without first becoming a liquid.
- T**
- technology (9)** An application of science that is used to make products or tools that people can use to solve problems, make our lives easier, and improve the world.
- tectonic plates (7)** Extremely large pieces of the lithosphere or Earth's crust.
- transfer (6)** The movement of one form of energy from place to place, i.e. conduction, mechanically or electrically.
- transformation (6)** The conversion of energy from one form to another.
- U**
- unbalanced forces (4)** Forces that do not cancel each other out (nonzero net force) which changes an object's motion.



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W

water cycle (7)

The continuous movement of water between Earth's surface and the air, changing from liquid to gas to liquid. This includes the processes of evaporation, condensation, precipitation, and collection/runoff.

wavelength (4)

The distance from one peak to the next on a wave.

weather (8)

The conditions of the atmosphere at a certain place and time, determined by factors that include air pressure, amount of moisture in the air, temperature, wind, and precipitation.

weathering (7)

The process through which rocks or other materials are broken down into smaller pieces.