

# Instructional Vocabulary

## Grade 7 Science

### Unit 1: Science Safety and Procedures

- **Procedures** – sets of specific steps that must be completed to reproduce the same result under the same conditions
- **Safety equipment** – equipment, such as goggles and aprons, used for protection in an investigation

### Unit 2: Flow of Energy

- **Biomass** - total mass of living organisms in a given area
- **Trophic level** – the position that an organism occupies in a food chain, i.e., what it eats, and what eats it

### Unit 3: Force and Motion

- **Work** – the application of a force to an object and the object’s movement in the direction the force is applied
- **Turgor pressure** – pressure exerted by water inside the cell on the cell wall
- **Geotropism** – growth that happens in living organisms in response to gravity, such as the downward growth of plant roots

### Unit 4: Factors Impacting Earth Systems

- **Catastrophic event** – a violent, usually destructive, natural occurrence
- **Ecoregion** – pattern of ecosystems with combinations of soil and landform that characterize region
- **Watershed** – an area of land where all of the ground and surface water from the area drains into the same place

### Unit 5: Life in our Solar System

- **Mass** – amount of matter in an object
- **Weight** – force exerted on an object by gravity

### Unit 6: Organisms and the Environment

- **Biodiversity** – variety of organisms in an ecosystem or biome
- **Sustainability** – ability to maintain ecological processes over long periods of time; ability of an ecosystem to maintain its structure and function over time
- **Ecological succession** – the changing sequence of communities that live in an ecosystem during a given time period

### Unit 7: Structure and Function of Cells

- **Organelle** – differentiated structure within a cell that performs a specific function

## Unit 8: Structure and Function of Living Systems

- **System** – interacting, interrelated, or interdependent elements forming a more complex whole
- **Adaptation** – a change in structure or habits, often hereditary, by which an organism improves its condition in relationship to its environment

## Unit 9: Physical, Chemical, and Energy Changes in Digestion

- **Molecule** – smallest particle of a substance that retains the chemical and physical properties of the substance; composed of two or more atoms held together by chemical bonds
- **Organic** – class of chemical compounds that are formed from carbon, but may contain other elements
- **Chemical change** – rearrangement of the atomic makeup of matter, which results in a change of physical properties
- **Physical change** – change which alters matter without changing its chemical composition or the identity of the substance
- **Thermal energy** – energy in the form of heat

## Unit 10: Homeostasis

- **Homeostasis** – the body's ability to keep the internal balance of the body stable

## Unit 11: Genetics

- **Traits** – behavioral characteristics or physical attributes of an organism that are expressed by genes and/or influenced by the environment
- **Gene** – a hereditary unit consisting of a sequence of DNA that occupies a specific location on a chromosome and determines a particular characteristic in an organism

## Unit 12: Genetic Variations and Adaptations

- **Natural selection** – process by which gene frequencies in a population change through certain individuals producing more offspring than others because they are better able to survive and reproduce
- **Selective breeding** – making deliberate crosses of plants or mating of animals, so the offspring will have a desired characteristic derived from one of the parents