

## Instructional Vocabulary

### Grade 6 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
- **Protective safety equipment** – equipment, such as goggles and aprons, used for protection in an experiment

#### Unit 2: Physical Properties of Matter

- **Metals** – substances that have the physical properties of luster, conductivity, malleability, and ductility; may appear in all three states of matter
- **Nonmetals** – substances that have the physical properties of being dull, insulators, and brittle; may appear in all three states of matter
- **Metalloids** – substances that exhibit some properties of metals and nonmetals
- **Density** – a measure of how much matter is in a certain volume of a substance

#### Unit 3: Elements

- **Element** – a substance that cannot be broken down chemically into simpler substances

#### Unit 4: Compounds

- **Compound** – a substance made by chemically combining two or more elements, so that the bond cannot be broken by physical means
- **Precipitate** – the solid that is formed as a result of a precipitation reaction

#### Unit 5: Energy Resources

- **Energy resources** – anything that can be used as a source of energy to do work
- **Energy conservation** – management of energy use through insulation, increasing energy frequency, and changes in patterns of use

#### Unit 6: Conservation of Energy

- **Energy** – the ability to cause change or do work
- **Heat** – transfer of thermal energy between substances that are at different temperatures
- **Temperature** – measure of the average kinetic energy of the particles in a substance

#### Unit 7: Force and Motion

- **Potential energy** – the stored energy of position possessed by an object
- **Kinetic energy** – the energy contained in a moving mass or moving particle; energy of motion
- **Speed** – the distance traveled by an object in a given amount of time

- **Unbalanced force** – when the net force on an object does not equal zero
- **Velocity** – a measurement of speed and direction

#### Unit 8: Solar System and Exploration

- **Gravity** – force of attraction between two objects due to their masses- the larger the mass, the greater the attraction
- **Model** – representation or description of an object, system, or phenomenon that shares important characteristics with the actual object, system, or phenomenon and may be used for further study of its properties

#### Unit 9: Earth Materials

- **Metamorphic** – a type of rock formed when igneous or sedimentary rocks are put under intense heat and/or pressure in the Earth's crust
- **Igneous** – a type of rock formed when crystallized through melting and cooling rock
- **Sedimentary** – a type of rock formed through the accumulation, compaction, and cementation of sediment
- **Rock cycle** – the continual process by which rocks can be changed into different types of rock
- **Asthenosphere** – the somewhat fluid portion of the mantle upon which the lithosphere is located
- **Lithosphere** – the top most layer of the Earth, which is comprised of the crust and solid portion of the upper mantle, divided into plates, and moves atop the layer known as the asthenosphere

#### Unit 10: Plate Tectonics

- **Plate** – distinct sections of the lithosphere which make up the outermost layer of the Earth
- **Tectonics** – study of the movement of large masses of rock, known as plates, on the Earth's surface; includes folds, faults, and plate movement
- **Theory** – an explanation of a set of related observations or events based upon proven hypotheses and verified multiple times by groups of detached researchers; can be used to explain and predict natural phenomena
- **Plate boundary** – a region where two lithospheric plates meet

#### Unit 11: Taxonomic Groups

- **Cell** – a basic unit of structure and function in living things
- **Nucleus** – a structure within a cell that contains the cell's DNA and is responsible for growth and reproduction
- **Prokaryote** – an organism whose cells do not contain a nucleus
- **Eukaryote** – an organism whose cells do have a nucleus
- **Autotroph** – organisms, known as producers in a food chain, capable of synthesizing their own food by a process known as photosynthesis; all plants and some forms of bacteria come under this category
- **Heterotroph** – organisms, known as consumers in a food chain, which cannot synthesize their own food; carnivores, herbivores, omnivores, and saprobes fall under this category

#### Unit 12: Ecosystems

- **Ecosystem** – the living populations in an area and nonliving components of that environment

- **Community** – all of the populations sharing a specific area or region
- **Population** – all of the members of a species living in a particular area at a particular time
- **Biotic** – relating to, produced by, or caused by living organisms
- **Abiotic** – nonliving factors in the environment