Science
Kindergarten

1.0 Understands and applies the skills of scientific inquiry.
1.1 Asks questions about objects, organisms, and events in the environment.
1.2 Develops a growing curiosity and interest in the living world around them.
1.3 Plans and conducts simple investigations.
1.4 Makes a prediction based on prior knowledge.
1.5 Develops a hypothesis.
1.6 Collects scientific information from careful observation.
1.7 Uses tools to gather data and extend the senses.
1.8 Names and uses hand lenses, thermometers, safety goggles, strainer rulers.
1.9 Uses mathematics in scientific inquiry.
1.10 Uses ruler and other tools to collect data to show result.
1.11 Uses non-standard units of measurement.
1.12 Recognizes and analyzes alternative predictions, explanations, and models.
1.13 Uses data to construct reasonable explanations.
1.14 Draws conclusions based on simple investigations.
1.15 Understands what constitutes evidence.
1.16 Communicates and defends procedures, explanations, and scientific arguments.
1.17 Communicates orally through writing and drawings.
1.18 Critiques and analyzes their work.
1.19 Follows appropriate safety procedures when conducting investigations.
1.20 Handles animals with care.
1.21 Uses scientific tools correctly and safely.

2.0 Understands and applies scientific concepts, principles, and theories pertaining to Earth and the Universe.
2.1 Distinguishes between day and night.
2.2 Observes constant and changing patterns in the day and night sky.
2.3 Observes that the sun can be seen only in the daytime, but the moon can be seen sometimes at night and sometimes during the day.
2.4 Recognizes that there are more stars in the sky than anyone can easily count.
2.5 Understands and applies knowledge of properties of earth materials.

2.6 Knows that the earth consists of water and earth materials.

3.0 Understands and applies concepts, principles and theories pertaining to life and its interactions.

3.1 Explores the organisms, including people, have basic needs which include air, water, food and shelter.
3.2 Discovers that there are living things and non-living things. (plants – rocks).
3.3 Discovers that stories (cartoons, movies) sometimes give plants and animals characteristics they do not have (talking flowers).
3.4 Observes and describes the structure of a variety of common animals (fish, snails, isopods, and worms).
3.5 Understands and applies life cycles of plants and animals.
3.6 Knows the life cycle of a plant.
3.7 Understands and applies basic needs of plants and animals and understands how environments are related to the needs of plants and animals.
3.8 Knows that plants require air, water, and light to survive.
3.9 Understands the world has many different environments and distinct environments support the life of different types of organisms.
3.10 Understands and applies ways to help take care of the environment.
3.11 Understands that reducing, reusing, and recycling conserves the Earth's resources.
3.12 Identifies ways people depend on plants.
3.13 Identifies and describes the five senses.
3.14 Understands the importance of good hygiene (hand washing, sneezing & coughing in sleeve, brushing teeth, using tissue).

4.0 Understands and applies concepts and theories pertaining to matter, its composition and the forces that govern it.

4.1 Understands and applies knowledge of observable and measureable properties and objects.
4.2 Understands that everything is made of matter.
4.3 Discovers that many objects are made of parts that have different characteristics.
4.4 Describes these characteristics and recognizes ways an object may change (toys, chairs).
4.5 Classifies objects according to observable physical properties (wood, metal, plastic).
4.6 Describes and sorts objects by one or more properties (size, color, shape).

5.0 Understands the nature of science.

5.1 Understands how science develops and changes over time.

5.2 Knows that people are more likely to believe your ideas if you can give reasons for them.

5.3 Understands the dynamic relationship between science and society.

5.4 Understands that reducing, reusing, and recycling conserves the Earth's resources.