Science
First Grade

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 Uses variables to define hypothesis and results.
1.7 Collects scientific information from careful observation.
1.8 Uses tools to gather data and extend the senses.
1.9 Names and uses hand lenses, thermometers, screens, rulers, and rain gauge.
1.10 Uses mathematics in scientific inquiry.
1.11 Uses ruler clock, calculator, stopwatch, scales and other tools to collect data to show result.
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 (using data), 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 plants 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 Describes how water and weather change rocks.
2.2 Distinguishes between day and night.
2.3 Knows that the earth consists of water and earth materials.
2.4 Describes elements that are found in the earth's materials.

2.5 Identifies properties of various earth materials including soil, water, rock and wood.
2.6 Examines, sorts and compares rocks by like properties.
2.7 Identifies ways rocks are used in our world.

3.0 Understands and applies concepts, principles and theories pertaining to life and its interactions.
3.1 Understands and applies knowledge of the characteristics of living things.
3.2 Recognizes the basic parts of a plant.
3.3 Understands and applies life cycles of plants and animals.
3.4 Knows the life cycle of a plant.
3.5 Observes and describes how plants change as they grow.
3.6 Identifies the different methods of seed dispersal.
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.

4.0 Understands and applies concepts and theories pertaining to matter, its composition and the forces that govern it.
4.1 Understands positions and motions of objects.
4.2 Explores ways to change motion of objects.
4.3 Investigates the effect of force.
4.4 Understands and demonstrates the concept of balance and balance forces.

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.