Grade 1 – Science Standards

Standard	E&S Activities	Billy B & Me CD Songs
I. Inquiry **Process skills and inquiries are not an isolated unit of instruction and should be embedded throughout the content areas. Safety issues should be addressed as developmentally appropriate.** **A. Process Skills** **1. Observe**		
a. Use the senses to gather information about objects or events such as size, shape, color, texture, sound, position, and change (qualitative observations).	**1 - Energy Detectives (variation)** **4 - What Powers the Move? (variation)**	
2. Classify		
a. Compare, sort, and group concrete objects according to observable properties.	**4 - What Powers the Move? (variation)**	
b. Arrange objects in sequential order.		
3. Measure		
a. Use standard (U.S. Customary and Metric) and nonstandard whole units to estimate and measure mass, length, volume, and temperature (quantitative observations).		
4. Communicate		
a. Use drawings, tables, graphs, written and oral language to describe objects and explain ideas and actions.	**2 - May the Source Be with You (variation)** **4 - What Powers the Move? (variation)**	
B. Inquiry **1. Plan and conduct a simple investigation.**		
a. Ask a question about objects, organisms, and events in the environment.		
b. Employ simple equipment, such as hand lenses, thermometers, balances, etc., to gather data and extend the senses.		
II. Life Science **Unit of Study: Plants** **A. Characteristics of Organisms** **1. Organisms have basic needs.**		
a. Investigate and explain that plants require air, water, nutrients, space, and light to survive and reproduce.	**1 - Energy Detectives (variation)**	**It is the Energy, It is the Sun** **The Rock and Roll of Photosynthesis** **Yummy, Yummy**
2. Plants have basic structures.		

Grade 1 – Science Standards

Standard	E&S Activities	Billy B & Me CD Songs
a. Identify the parts of a plant (seeds, roots, stems, leaves, flower, and fruit).		
b. Classify edible plant parts as seeds, roots, etc.		
c. Explore and compare methods of seed dispersal.		
B. Life Cycles of Organisms		
1. Plants have life cycles. The details of the life cycle are different for different organisms.		
a. Observe and communicate the growth and development of a variety of plants from seed.		
b. Recognize that fruits and nuts come from flowers.		
C. Organisms and Their Environments		
1. Organisms can survive only in environments in which their needs can be met.		
a. Classify plants according to their habitats.		
b. Describe characteristics of plants that help them to survive in specific environments.		**The Rock and Roll of Photosynthesis** **Yummy, Yummy**
2. All organisms cause changes in the environment where they live.		
a. Explore and describe that living things can change the environment.		
b. Investigate how natural resources can be reused and recycled to reduce consumption. **(P)**		**What, What Is. . .** **Resources** **Reduce, Reuse, Recycle Engine Oil** **We Can Save Energy**
b. **Earth Science** **Unit of Study: Things in the Sky**		
b. **Objects in the Sky**		
1. The sun, moon, and stars have properties, locations and movements that can be observed and described.		
a. Observe and describe the basic relationships between the sun, moon, and Earth.		
b. Identify that the sun is a star and is the source of heat and light for Earth.	**1 - Energy Detectives (variation)**	**It is the Energy, It is the Sun** **Water Cycle**
B. Changes in the Earth and Sky		
1. The sun and moon appear to move across the sky on a daily basis.		
a. Observe and compare the day and the night sky.		
b. Observe and describe changes in shadows over time.		
c. Observe and describe the phases of the moon over time looking for patterns.		

Grade 1 – Science Standards

Standard	E&S Activities	Billy B & Me CD Songs
IV. Physical Science **Units of Study: Properties of Objects and Materials Exploring Motion**		
A. Properties of Objects and Materials **1. Objects have many observable properties, including size, mass, shape, color, and temperature.**		
a. Observe, describe, compare and classify common physical properties of matter.		
2. Properties of matter can be measured using tools, such as rulers, balances, and thermometers.		
a. Measure length, mass, and temperature of various materials in nonstandard and standard units. (U.S. Customary and Metric Systems)		
b. Sort objects and materials based on a single attribute.		
3. Objects can be described by the properties of the materials from which they are made, and those properties can be used to separate or sort a group of objects or materials.		
a. Investigate that some materials mix with water and others will not.		
b. Make and separate simple mixtures.		
4. Materials can exist in different states.		
a. Explore and describe characteristics of solids.		
b. Explore and describe characteristics of liquids.		
c. Identify materials as either solid or liquid.		
B. Position and Motion of Objects **1. The position and motion of objects can be changed by pushing and pulling.**		
a. Investigate the effect of a push or a pull on the position and motion of common objects.		
b. Explore and describe patterns of motion.		