

## Grade 1 Science Frameworks

*Science vocabulary for Preschool through grade 2 will be based on the resource materials selected to support the Frameworks.*

**Standard 1: Students apply the processes of scientific investigation and design, conduct, communicate about and evaluate such investigations.**

Students know and are able to:	Indicators of Performance	Resources
use their senses to make and describe careful observations.	<ul style="list-style-type: none"> <li>• follows a plan to conduct an investigation that includes asking questions, making observations, and describing what happened.</li> </ul>	
ask questions and make predictions.	<ul style="list-style-type: none"> <li>• (same as above)</li> </ul>	
conduct simple experiments using tools and technology.	<ul style="list-style-type: none"> <li>• uses simple tools to make observations and compare objects (magnifiers, balances, etc.).</li> </ul>	
record data, report on findings and explain with reasons.	<ul style="list-style-type: none"> <li>• communicates about an investigation orally, with labeled pictures and charts, and/or by writing descriptions and simple reports.</li> </ul>	

**Standard 2: Physical Science: Students know and understand common properties, forms, and changes in matter and energy.**

Students know and are able to:	Indicators of Performance	Resources
explain that the only way to change the motion of an object is by pushing or pulling on it (force).	<ul style="list-style-type: none"> <li>▪ observes, describes, and compares the motion of a variety of objects.</li> <li>▪ describes what happens to objects that are balanced but lose stability.</li> <li>▪ describes what happens to cause objects that are in motion to slow or change direction (pushing/pulling).</li> </ul>	

**Standard 3: Life Science: Students know and understand the characteristics of living things, the processes of life, and how living things interact with each other and their environment.**

<b>Students know and are able to:</b>	<b>Indicators of Performance:</b>	<b>Resources</b>
<p>identify an organism (plant, animal) as a living thing that has physical characteristics that help it to survive.</p>	<ul style="list-style-type: none"> <li>▪ identifies needs of a living plant.</li> <li>▪ recognizes the importance of light (energy) to the survival of plants.</li> <li>▪ observes and labels the parts of a plant: root, stem, leaves, buds, flowers, seeds.</li> </ul>	
<p>identify the similarities and differences in growth and development of organisms (insects, plants, mammals).</p>	<ul style="list-style-type: none"> <li>▪ describes and sequences the life cycle and growth of a plant starting from a seed.</li> </ul>	
<p>identify how organisms interact with each other and with nonliving parts of their habitat to meet their basic needs (food, water, air, shelter, space).</p>	<ul style="list-style-type: none"> <li>▪ explains how plants are a source of food for humans and other animals.</li> </ul>	

**Standard 4: Earth and Space Science: Students know and understand the processes and interactions of Earth’s systems and the structure and dynamics of Earth and other objects in space.**

<b>Students know and are able to:</b>	<b>Indicators of Performance:</b>	<b>Resources</b>
identify the sun as the source of Earth’s heat and light.	<ul style="list-style-type: none"> <li>• explains that the Earth’s sun gives light and heat.</li> </ul>	
identify readily observed objects in the daytime and nighttime sky (sun, moon, stars).	<ul style="list-style-type: none"> <li>▪ observes Earth’s moon regularly for at least a month and describes changes over time. Students explore their ideas about the moon and its movement and shadow patterns.</li> <li>▪ recognizes differences and similarities between the moon and the sun and the moon and the Earth.</li> <li>▪ describes that stars are visible in the nighttime sky.</li> </ul>	

**Standard 5: Students understand that the nature of science involves a particular way of building knowledge and making meaning of the natural world.**

<b>Students know and are able to:</b>	<b>Indicators of Performance:</b>	<b>Resources</b>
recognize basic observable patterns and changes in the world and predict future events based on those patterns (seasonal weather patterns, day/night)	<ul style="list-style-type: none"> <li>• identifies observable patterns, interactions and changes.</li> </ul>	

