

Kindergarten Science Standards

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| Theme: Observations of the Environment | | |
| This theme focuses on helping students develop the skills for systematic discovery to understand the science of the physical world around them in greater depth by using scientific inquiry. | | |
| Science Inquiry and Application | | |
| <i>During the years of K-4 all students must use the following scientific processes to construct their knowledge and understanding in all science content areas:</i> | | |
| <ul style="list-style-type: none"> • <i>Observe and ask questions about the natural environment;</i> • <i>Plan and conduct simple investigations;</i> • <i>Employ simple equipment and tools to gather data and extend the senses;</i> • <i>Use appropriate mathematics with data to construct reasonable explanations;</i> • <i>Communicate about observations, investigations and explanations; and</i> • <i>Review and ask questions about the observations and explanations of others.</i> • <i>Apply Catholic values to development and application of science concepts.</i> | | |
| Strands | | |
| <i>Strand Connections:</i> <i>Observations of both living and nonliving things in local surroundings. This includes water, the sun, rocks and soil, human-made materials and living organisms. This encourages the examination and exploration of the environment.</i> | | |
| Earth and Space Science | Physical Science | Life Science |
| Topic: Observations of Nature <i>This topic focuses on observing, exploring and describing the local natural environment.</i> | Topic: Observations of Objects and Materials <i>This topic focuses on making sound and observing, exploring and describing properties of objects and materials that can be found in nature, classrooms and homes.</i> | Topic: Observations of Living Things <i>This topic focuses on observing, exploring and describing external, physically observable characteristics and behaviors of plants and animals found in their local natural environment, in classrooms and homes.</i> |

| Content Statements | | |
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| <p>Weather changes are long term and short term.</p> <p>Weather changes occur throughout the day and from day to day. Air is a nonliving substance that surrounds Earth, wind is moving air. Wind, temperature and precipitation document short-term weather changes. Yearly weather changes (seasons) are observable patterns in the daily weather changes.</p> <p>Note: The focus is on observing the weather patterns of seasons. The reason for changing seasons is not appropriate for this grade level; this is found in grade 5.</p> | <p>Objects and materials can be sorted and described by their properties.</p> <p>Objects can be sorted and described by the properties of the materials from which they are made. Some of the properties can include color, size or texture.</p> | <p>Living things are different from nonliving things.</p> <p>Living things include anything that is alive or has ever been alive. Living things have specific traits. Living things grow and reproduce. Living things are found almost everywhere in the world. There are somewhat different kinds in different places.</p> |
| <p>The moon, sun and stars are visible at different times of the day or night.</p> <p>The moon, sun and stars are in different positions at different times of the day or night. Sometimes the moon is visible during the night, sometimes the moon is visible during the day and at other times the moon is not visible at all. The observable shape of the moon changes in size very slowly throughout each day of every month. The sun is visible only during the day. The sun's position in the sky changes in a single day and from season to season. Stars are visible at night, some are visible in the evening or morning, and some are brighter than others.</p> | <p>Some objects and materials produce sound.</p> <p>Sound is produced by touching, blowing or tapping objects. The sounds that are produced vary depending on the properties of objects. Sound is produced when objects vibrate.</p> | <p>Living things have physical traits and behaviors, which influence their survival.</p> <p>Living things are made up of a variety of structures. Some of these structures and behaviors influence their survival.</p> <p>Note: This concept is addressed in Pre-K, but is included here for schools that do not have a Pre-K program.</p> |