

**McKinley Presidential Library & Museum
Discover World Tour Ohio Science Standards
Kindergarten**



MCKINLEY PRESIDENTIAL
Library & Museum

Strand:	Daily and Seasonal Changes	<i>This topic focuses on observing, exploring, describing and comparing weather changes, patterns in the sky and changing seasons.</i>
Earth	Weather changes are long term and short term	<ul style="list-style-type: none"> Weather changes occur throughout the day and from day to day. Air is a nonliving substance that surrounds Earth and wind is air that is moving. Wind, temperature and precipitation can be used to document short-term weather changes that are observable. Yearly weather changes (seasons) are observable patterns in the daily weather changes.
Strand:	Physical and Behavioral Traits of Living Things	<i>This topic focuses on observing, exploring, describing and comparing living things in Ohio.</i>
Life	<p>Living things are different from non-living things</p> <p>Living things have physical traits and behavior, which influence their survival.</p>	<ul style="list-style-type: none"> Living things include anything that is alive or has ever been alive. Living things have specific characteristics and traits. Living things grow and reproduce. Living things are found almost everywhere in the world. There are somewhat different kinds in different places. Living things are made up of a variety of structures. Some of these structures and behaviors influence their survival.
Strand:	Properties of Everyday Objects and Materials	<i>This topic focuses on the production of sound and on observing, exploring, describing and comparing the properties of objects and materials with which the student is familiar.</i>
Physical	<p>Objects and materials can be sorted and described by their physical properties</p> <p>Some objects and materials can be made to vibrate and produce sound.</p>	<ul style="list-style-type: none"> 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 and texture. 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.

During the years of PreK to grade 4, all students must develop the ability to:

- Observe and ask questions about the natural environment***
- Plan and conduct simple investigations***
- Employ simple equipment and tools to gather data and extend the senses***
- Use appropriate mathematics with data to construct reasonable explanations***
- Communicate about observations, investigations and explanations***
- Review and ask questions about the observations and explanations of others.***

(Ohio Dept. of Education, adopted 2011)

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First Grade



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Strand:	Sun, Energy and Weather	<i>This topic focuses on the sun as a source of energy and energy changes that occur to land, air and water.</i>
Earth	<p>The sun is the principal source of energy.</p> <p>The physical properties of water can change.</p>	<ul style="list-style-type: none"> • Sunlight warms Earth's land, air and water. The amount of exposure to sunlight affects the amount of warming or cooling of air, water and land. • These changes occur due to changing energy. Water can change from a liquid to a solid and from a solid to a liquid. Weather observations can be used to examine the property changes of water
Strand:	Basic Needs of Living Things	<i>This topic focuses on the physical needs of living things in Ohio. Energy from the sun or food, nutrients, water, shelter and air are some of the physical needs of living things.</i>
Life	<p>Living things have basic needs, which are met by obtaining materials from the physical environment.</p> <p>Living things survive only in environments that meet their needs.</p>	<ul style="list-style-type: none"> • Living things require energy, water and a particular range of temperatures in their environments. Plants get energy from sunlight. Animals get energy from plants and other animals. Living things acquire resources from the living and nonliving components of the environment. • Resources are necessary to meet the needs of an individual and populations of individuals. Living things interact with their physical environments as they meet those needs. Effects of seasonal changes within the local environment directly impact the availability of resources.
Strand:	Motion and Materials	<i>This topic focuses on the changes in properties that occur in objects and materials. Changes of position of an object are a result of pushing or pulling.</i>
Physical	<p>Properties of objects and materials can change.</p> <p>Objects can be moved in a variety of ways, such as straight, zigzag, circular and back and forth.</p>	<ul style="list-style-type: none"> • Objects and materials change when exposed to various conditions, such as heating or freezing. Not all materials change in the same way. • The position of an object can be described by locating it relative to another object or to the object's surroundings. An object is in motion when its position is changing. The motion of an object can be affected by pushing or pulling. A push or pull is a force that can make an object move faster, slower or go in a different direction.

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- Use appropriate mathematics with data to construct reasonable explanations***
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