

<b>Content:</b> Science	<b>Grade or Course:</b> Kindergarten	<b>Date Developed:</b> 5/16/2018
<p><b>Overview:</b> In Kindergarten, students are expected to develop understanding of patterns and variations in local weather and the purpose of weather forecasting to prepare for, and respond to, severe weather. Students are able to apply an understanding of the effects of different strengths or different directions of pushes and pulls on the motion of an object to analyze a design solution. Students are also expected to develop understanding of what plants and animals (including humans) need to survive and the relationship between their needs and where they live. In the kindergarten performance expectations, students are expected to demonstrate grade-appropriate proficiency in asking questions, developing and using models, planning and carrying out investigations, analyzing and interpreting data, designing solutions, engaging in argument from evidence, and obtaining, evaluating, and communicating information. Students are expected to use these practices to demonstrate understanding of the core ideas.</p>		
<p><b>Essential Questions:</b></p> <p><b>Physical Science Essential Questions:</b></p> <ul style="list-style-type: none"> <li>● How is light, sound and heat observed in our everyday lives?</li> <li>● How can objects be sorted and categorized based on their attributes?</li> <li>● How and why do different objects move?</li> </ul> <p><b>Life Science Essential Questions:</b></p> <ul style="list-style-type: none"> <li>● How do certain characteristics of plants and animals help them to survive?</li> <li>● How do plants and animals change during their life cycles?</li> <li>● How are animal habitats different from one another and the same?</li> </ul> <p><b>Earth Science Essential Questions:</b></p> <ul style="list-style-type: none"> <li>● How does recycling benefit Earth?</li> <li>● How are the characteristics of air, water, soil and rock the same and different?</li> <li>● Why does the weather change?</li> </ul>		
<p><b>EO's addressed to proficiency level:</b></p> <p><b>Asking Questions and Defining Problems-</b></p> <ol style="list-style-type: none"> <li>A. Ask questions based on observations to find more information about the nature and/or designed worlds.</li> <li>B. Ask and/or identify questions that can be answered by an investigation.</li> <li>C. Define a simple problem that can be solved through the development of a new or improved object or tool.</li> </ol>		

**Standards:**

**Forces & Interactions: Pushes and Pulls**

- K-PS2-1-Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.
- K-PS2-2-Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.

**Interdependent Relationships in Ecosystems: Animals, Plants, and Their Environments**

- K-LS1-1-Use observations to describe patterns of what plants and animals (including humans) need to survive.
- K-ESS2-2-Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
- K-ESS3-1-Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.
- K-ESS3-3-Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

**Weather & Climate**

- K-PS3-1-Make observations to determine the effect of sunlight on Earth's surface.
- K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area
- K-ESS2-1-Use and share observations of local weather conditions to describe patterns over time.
- K-ESS3-2-Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.

**Units:**

- Ecosystems
- Push and Pull
- Weather and Climate

**Assessments:**

[Push and Pull](#)

Ecosystems

Weather and Climate

