

**Chicago Ridge District 127.5  
Kindergarten Science Scope and Sequence**

Unit	Disciplinary Core Ideas	Performance Expectations	SEP	CCC
<p><b><u>Independent Relationships in Ecosystems: Animals, Plants, and Their Environment</u></b></p> <p><b><u>Unit 1 Plants and Animals</u></b></p> <p>Chapter 1 <u>What Do Plants Need?</u></p> <p>Chapter 2 <u>What Do Animals Need?</u></p> <p>Chapter 3 <u>What Do People Need?</u></p> <p>Chapter 4 <u>Where Are Plants and Animals Found?</u></p> <p>Chapter 5</p>	<p><b>LS1.C: Organization for Matter and Energy Flow in Organisms</b> <u>(K-LS1-1)</u></p> <p><b>ESS2.E: Biogeology</b> <u>(K-ESS2-2)</u></p> <p><b>ESS3.A: Natural Resources</b> <u>(K-ESS3-1)</u></p> <p><b>ESS3.C: Human Impacts on Earth Systems</b> <u>(K-ESS3-3)</u></p> <p><b>ETS1.B: Developing Possible Solutions</b> <u>secondary to (k-ESS3-3)</u></p>	<p>Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. <u>K-ESS2-2</u></p> <p>Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live. <u>K-ESS3-1</u></p> <p>Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment. <u>K-ESS3-3</u></p> <p>Use observations to describe patterns of what plants and animals (including humans) need to survive. <u>K-LS1-1</u></p>	<p><b>Developing and Using Models</b> <u>(K-ESS3-1)</u></p> <p><b>Analyzing and Interpreting Data</b> <u>(K-LS1-1)</u></p> <p><b>Engaging in Argument from Evidence</b> <u>(K-ESS2-2)</u></p> <p><b>Obtaining, Evaluating, and Communicating Information</b> <u>(K-ESS3-3)</u></p> <p><b>Connections to Nature of Science</b></p> <p><b>Science Knowledge Is Based on Empirical Evidence</b> <u>(K-LS1-1)</u></p>	<p><b>Patterns</b> <u>(K-LS1-1)</u></p> <p><b>Cause and Effect</b> <u>(K-ESS3-3)</u></p> <p><b>Systems and System Models</b> <u>(K-ESS2-2), (K-ESS3-1)</u></p>

<p><u>How Do Plants and Animals Change Earth?</u></p> <p>Chapter 6 <u>How Do People Change Earth?</u></p> <p>Chapter 7 <u>How Can People Take Care of Earth?</u></p>				
Unit	Disciplinary Core Ideas	Performance Expectations	SEP	CCC
<p><b><u>Forces and Interactions: Pushes and Pulls</u></b></p> <p><b><u>Unit 2 Pushes and Pulls</u></b></p> <p>Chapter 1 <u>How Do Things Move?</u></p> <p>Chapter 2 <u>What Do Pushes and Pulls Do?</u></p> <p>Chapter 3 <u>How Do Pushes and Pulls Move Things?</u></p> <p>Chapter 4 <u>What Happens When Objects Bump?</u></p> <p>Chapter 5</p>	<p><b>PS2.A: Forces and Motion</b> <i>(K-PS2-1), (K-PS2-2)</i></p> <p><b>PS2.B: Types of Interactions</b> <i>(K-PS2-1)</i></p> <p><b>PS3.C: Relationship Between Energy and Forces</b> <i>(secondary to K-PS2-1)</i></p> <p><b>ETS1.A: Defining and Delimiting Engineering Problems</b> <i>(secondary to K-PS2-1)</i></p>	<p>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 <u>K-PS2-1</u></p> <p>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. <u>K-PS2-2</u></p>	<p><b>Planning and Carrying Out Investigations</b> <i>(K-PS2-1)</i></p> <p><b>Analyzing and Interpreting Data</b> <i>(K-PS2-2)</i></p> <p><b>Connections to Nature of Science</b></p> <p><b>Scientific Investigations Use a Variety of Methods</b> <i>(K-PS2-1)</i></p>	<p>Cause and Effect Simple tests can be designed to gather evidence to support or refute student ideas about causes. (K-PS2-1), (K-PS2-2)</p>

How Do People Design Things That Move?				
Unit	Disciplinary Core Ideas	Performance Expectations	SEP	CCC
<p><b><u>Weather and Climate</u></b></p> <p><b><u>Unit 3 Weather</u></b></p> <p>Chapter 1 <u>What Is Weather?</u></p> <p>Chapter 2 <u>When Does Weather Change?</u></p> <p>Chapter 3 <u>What Keeps Earth Warm?</u></p> <p>Chapter 4 <u>How Can People Stay Cool in Hot Weather?</u></p> <p>Chapter 5 <u>What Makes Storms on Earth?</u></p> <p>Chapter 6 <u>How Can People Prepare for Storms?</u></p>	<p><b>PS3.B: Conservation of Energy and Energy Transfer</b> <small>(K-PS3-1), (K-PS3-2)</small></p> <p><b>ESS2.D: Weather and Climate</b> <small>(K-ESS2-1)</small></p> <p><b>ESS3.B: Natural Hazards</b> <small>(K-ESS3-2)</small></p> <p><b>ETS1.A: Defining and Delimiting Engineering Problems</b> <small>(K-ESS3-2)</small></p>	<p>Use and share observations of local weather conditions to describe patterns over time. <small>K-ESS2-1</small></p> <p>Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather. <small>K-ESS3-2</small></p> <p>Make observations to determine the effect of sunlight on Earth’s surface. <small>K-PS3-1</small></p> <p>Use tools and materials provided to design and build a structure that will reduce the warming effect of sunlight on an area. <small>K-PS3-2</small></p>	<p><b>Asking Questions and Defining Problems</b> <small>(K-ESS3-2)</small></p> <p><b>Planning and Carrying Out Investigations</b> <small>(K-PS3-1)</small></p> <p><b>Analyzing and Interpreting Data</b> <small>(K-ESS2-1)</small></p> <p><b>Constructing Explanations and Designing Solutions</b> <small>(K-PS3-2)</small></p> <p><b>Obtaining, Evaluating, and Communicating Information</b> <small>(K-ESS3-2)</small></p> <p><b>Connections to Nature of Science</b></p> <p><b>Science Knowledge Is Based on Empirical Evidence</b> <small>(K-ESS2-1)</small></p> <p><b>Scientific Investigations Use a Variety of Methods</b> <small>(K-PS3-1)</small></p>	<p><b>Cause and Effect</b> <small>(K-ESS3-2)</small></p> <p><b>Influence of Science, Engineering, and Technology on Society and the Natural World</b> <small>(K-ESS3-2)</small></p> <p><b>Interdependence of Science, Engineering, and Technology</b> <small>(K-ESS3-2)</small></p>