

Chicago Ridge District 127.5
3rd Science Scope and Sequence

Unit	Disciplinary Core Ideas	Performance Expectations	SEP	CCC
<p><u>Interdependent Relationships in Ecosystems</u></p> <p><u>Unit 1 Environments and Living Things</u></p> <p>Chapter 1 <u>Where Do Organisms Live?</u></p> <p>Chapter 2 <u>How Does Living in a Group Help Some Animals Survive?</u></p> <p>Chapter 3 <u>How Do Environments Change?</u></p> <p>Chapter 4 <u>What Happens to Organisms in Changing Environments?</u></p> <p>Chapter 5 <u>How Do People Learn About Extinct Organisms?</u></p> <p>Chapter 6 <u>What Do Fossils Show About Environments of Long Ago?</u></p>	<p>LS2.C: Ecosystem Dynamics, Functioning, and Resilience <i>(secondary to 3-LS4-4)</i></p> <p>LS2.D: Social Interactions and Group Behavior <i>(3-LS2-1)</i></p> <p>LS4.A: Evidence of Common Ancestry and Diversity <i>(3-LS4-1) (3-LS4-1)</i></p> <p>LS4.C: Adaptation <i>(3-LS4-3)</i></p> <p>LS4.D: Biodiversity and Humans <i>(3-LS4-4)</i></p>	<p>Construct an argument that some animals form groups that help members survive. <u>3-LS2-1</u></p> <p>Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago. <u>3-LS4-1</u></p> <p>Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. <u>3-LS4-3</u></p> <p>Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. <u>3-LS4-4</u></p>	<p>Analyzing and Interpreting Data <i>(3-LS4-1)</i></p> <p>Engaging in Argument from Evidence <i>(3-LS2-1) (3-LS4-3) (3-LS4-4)</i></p>	<p>Cause and Effect <i>(3-LS2-1), (3-LS4-3)</i></p> <p>Scale, Proportion, and Quantity <i>(3-LS4-1)</i></p> <p>Systems and System Models <i>(3-LS4-4)</i></p> <p>Connections to Engineering, Technology, and Applications of Science</p> <p>Interdependence of Science, Engineering, and Technology <i>(3-LS4-4)</i></p> <p>Connections to Nature of Science</p> <p>Scientific Knowledge Assumes an Order and Consistency in Natural Systems <i>(3-LS4-1)</i></p>
Unit	Disciplinary Core Ideas	Performance Expectations	SEP	CCC

<p><u>Forces and Interactions</u></p> <p><u>Unit 2 Forces and Motion</u></p> <p>Chapter 1 <u>What Do Forces Do?</u></p> <p>Chapter 2 <u>What Happens When Forces Are Balanced or Unbalanced?</u></p> <p>Chapter 3 <u>How Can You Predict Patterns of Motion?</u></p> <p>Chapter 4 <u>What Can Magnetic Forces Do?</u></p> <p>Chapter 5 <u>What Can Electric Forces Do?</u></p>	<p>PS2.A: Forces and Motion (3-PS2-1) (3-PS2-2)</p> <p>PS2.B: Types of Interactions (3-PS2-1) (3-PS2-3), (3-PS2-4)</p>	<p>Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object. <u>3-PS2-1</u></p> <p>Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion. <u>3-PS2-2</u></p> <p>Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other. <u>3-PS2-3</u></p> <p>Define a simple design problem that can be solved by applying scientific ideas about magnets. <u>3-PS2-4</u></p>	<p>Asking Questions and Defining Problems (3-PS2-4) (3-PS2-3)</p> <p>Planning and Carrying Out Investigations (3-PS2-1) (3-PS2-2)</p> <p>Connections to Nature of Science</p> <p>Science Knowledge Is Based on Empirical Evidence (3-PS2-2)</p> <p>Scientific Investigations Use a Variety of Methods (3-PS2-1)</p>	<p>Patterns (3-PS2-2)</p> <p>Cause and Effect (3-PS2-3) (3-PS2-1)</p> <p>Connections to Engineering, Technology, and Applications of Science</p> <p>Interdependence of Science, Engineering, and Technology (3-PS2-4)</p>
<p>Unit</p>	<p>Disciplinary Core Ideas</p>	<p>Performance Expectations</p>	<p>SEP</p>	<p>CCC</p>
<p><u>Weather and Climate</u></p> <p><u>Unit 3 Weather and Climate</u></p>	<p>Analyzing and Interpreting Data (3-ESS2-1)</p> <p>Engaging in Argument from Evidence. (3-ESS3-1)</p> <p>Obtaining, Evaluating, and</p>	<p>Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season. <u>3-ESS2-1</u></p> <p>Obtain and combine</p>	<p>Analyzing and Interpreting Data (3-ESS2-1)</p> <p>Engaging in Argument from Evidence (3-ESS3-1)</p>	<p>Patterns (3-ESS2-1), (3-ESS2-2)</p> <p>Cause and Effect (3-ESS3-1)</p> <p>Connections to Engineering, Technology,</p>

<p>Chapter 1 <u>What Makes Weather?</u></p> <p>Chapter 2 <u>How Is Temperature Measured?</u></p> <p>Chapter 3 <u>How Is Wind Measured?</u></p> <p>Chapter 4 <u>How Are Rain and Snow Measured?</u></p> <p>Chapter 5 <u>How Is Weather Predicted?</u></p> <p>Chapter 6 <u>How Are Weather and Climate Related?</u></p> <p>Chapter 7 <u>How Does Extreme Weather Affect People?</u></p> <p>Chapter 8 <u>How Can People Reduce Extreme Weather Damage?</u></p>	<p>Communicating Information <u>(3-ESS2-2)</u></p>	<p>information to describe climates in different regions of the world. <u>3-ESS2-2</u></p> <p>Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard. <u>3-ESS3-1</u></p>	<p>Obtaining, Evaluating, and Communicating Information <u>(3-ESS2-2)</u></p>	<p>and Applications of Science</p> <p>Influence of Science, Engineering, and Technology on Society and the Natural World <u>(3-ESS3-1)</u></p> <p>Connections to Nature of Science</p> <p>Science Is a Human Endeavor <u>(3-ESS3-1)</u></p>
<p>Unit</p>	<p>Disciplinary Core Ideas</p>	<p>Performance Expectations</p>	<p>SEP</p>	<p>CCC</p>
<p><u>Inheritance and Variation of Traits</u></p> <p><u>Unit 4 Life Cycles and Traits</u></p> <p>Chapter 1</p>	<p>LS1.B: Growth and Development of Organisms <u>(3-LS1-1)</u></p> <p>LS3.A: Inheritance of Traits <u>(3-LS3-1)</u> <u>(3-LS3-2)</u></p> <p>LS3.B: Variation of Traits</p>	<p>Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death. <u>3-LS1-1</u></p> <p>Analyze and interpret data to</p>	<p>Developing and Using Models <u>(3-LS1-1)</u></p> <p>Analyzing and Interpreting Data <u>(3-LS3-1)</u></p> <p>Constructing Explanations and Designing Solutions</p>	<p>Patterns <u>(3-LS1-1)</u> <u>(3-LS3-1)</u></p> <p>Cause and Effect <u>(3-LS3-2)</u>, <u>(3-LS4-2)</u></p>

<p><u>Why Do Offspring Look Similar to Their Parents?</u></p> <p>Chapter 2 <u>How Does the Environment Affect Traits?</u></p> <p>Chapter 3 <u>How Are Traits Affected by Both Inheritance and the Environment?</u></p> <p>Chapter 4 <u>Why Do Some Members of a Species Survive and Not Others?</u></p> <p>Chapter 5 <u>What Are the Life Cycles of Plants?</u></p> <p>Chapter 6 <u>What Are the Life Cycles of Animals with Backbones?</u></p> <p>Chapter 7 What Are the Life Cycles of Animals Without Backbones?</p>	<p><u>(3-LS3-1) (3-LS3-2)</u></p> <p>LS4.B: Natural Selection <u>(3-LS4-2)</u></p>	<p>provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms. <u>3-LS3-1</u></p> <p>Use evidence to support the explanation that traits can be influenced by the environment. <u>3-LS3-2</u></p> <p>Use evidence to construct an explanation for how the variations in characteristics among individuals of the same species may provide advantages in surviving, finding mates, and reproducing. <u>3-LS4-2</u></p>	<p><u>(3-LS3-2) (3-LS4-2)</u></p> <p>Connections to Nature of Science</p> <p>Science Knowledge Is Based on Empirical Evidence <u>(3-LS1-1)</u></p>	
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