



Grade 3 Next Generation Science Standards Course Pacing Guide

Narrative and Rationale: The four bundles in this Grade 3 model all have a particular topical focus. Bundle 1 focuses on traits of organisms. Bundle 2 builds on Bundle 1 to focus on relationships between organism traits and survival in a habitat. Bundle 3 extends this study to focus on how the climate affects organisms over long periods of time. Bundle 4 shifts focus to the physical sciences, with a study of forces and motion.

Throughout the first three bundles, students have the opportunity to build understanding over time of typical weather conditions expected. Alternately, this performance expectation (3-ESS2-1) could be included solely in Bundle 3. There are also a variety of opportunities to incorporate the 3–5 engineering design performance expectations throughout the year in addition to those shown in the bundles. Although two of these performance expectations are included in this 3rd grade model, they will be fully assessable at the end of grade five.

Grade 3 places special emphasis on making sense of data, using evidence to construct arguments and explanations, developing models, and planning and conducting investigations. However, the practices and crosscutting concepts described in each bundle are intended as end-of-instructional unit expectations and not curricular designations—additional practices and crosscutting concepts should be used throughout instruction in each bundle.

Michigan Model for Health Social and Emotional Health Safety Personal Health and Wellness	Bundle 1 Organism Traits ~ 9 weeks	Bundle 2 Advantages in Survival ~ 9 weeks	Bundle 3 Environmental Change over Time ~ 9 weeks	Bundle 4 Forces and Interactions of Objects ~ 9 weeks
Resources: MI Model http://www.spsd.net/wp-content/uploads/2018/03/SEX-ED-NEWSLETTER.pdf	Pearson Resources Chapter 3	Pearson Resources Chapter 4	Pearson Resources Chapter 5 Chapter 6	Pearson Resources Chapter 1 Chapter 2
	Bundle Question Why are organisms different from one another?	Bundle Question How does the environment affect organisms?	Bundle Question How do we know the environment used to be different?	Bundle Question What happens when different objects interact?

<p>Social/Emotional Sept/Oct: Lesson #4 Lesson #5</p> <p>Safety Feb/March: Lesson #3 Lesson #4</p> <p>Health/Wellness April/May: Lesson #1 Lesson #2</p> <p>Assessment Target: Pre-test: Sept/Oct Post-test: April/May</p>	<p>NGSS Standards</p> <p>3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.</p> <p>3-LS2-1. Construct an argument that some animals form groups that help members survive.</p> <p>3-LS3-1. Analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.</p> <p>3-LS3-2. Use evidence to support the explanation that traits can be influenced by the environment.</p> <p>3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</p>	<p>NGSS Standards</p> <p>3-LS2-1. Construct an argument that some animals form groups that help members survive.</p> <p>3-LS4-2. 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.</p> <p>3-LS4-3. 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.</p> <p>3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</p> <p>3-ESS3-1. Make a claim about the merit of a design solution that reduces the impacts of a weather-related hazard.</p> <p>3-5 ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p>	<p>NGSS Standards</p> <p>3-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.</p> <p>3-LS4-4. 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.</p> <p>3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.</p> <p>3-ESS2-2. Obtain and combine information to describe climates in different regions of the world.</p> <p>3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.</p>	<p>NGSS Standards</p> <p>3-PS2-1. Plan and conduct an investigation to provide evidence of the effects of balanced and unbalanced forces on the motion of an object.</p> <p>3-PS2-2. Make observations and/or measurements of an object's motion to provide evidence that a pattern can be used to predict future motion.</p> <p>3-PS2-3. Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.</p> <p>3-PS2-4. Define a simple design problem that can be solved by applying scientific ideas about magnets.</p>
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