

3rd Grade Thematic Model

Narrative and Rationale: The thematic model in Grade 3 is divided into four bundles that build on one another and increase in intellectual demand both in terms of content and the science and engineering practices. While other crosscutting concepts are included at this grade level, the crosscutting concepts of cause and effect is a theme that carries throughout the year.

The grade 3 disciplinary core ideas in physical science focus on forces and explanations for types of interactions involving motion, electricity, and magnetism. Core ideas in life science include life cycles of organisms, fossils as evidence of major changes over time in the environment, and traits influenced by inheritance and the environment. These ideas contribute to building the understanding that variations in traits among individuals of the same species can provide advantages in survival and reproduction. The core ideas in Earth and space science emphasize weather patterns, climates, and the connection between the two.

Note that the practices and crosscutting concepts included 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.

Bundle 1: How do objects affect the motion of other objects? ~9 Weeks	Bundle 2: What causes the differences between organisms? ~9 Weeks	Bundle 3: What affects organisms' survival? ~9 Weeks	Bundle 4: How does the climate affect organisms? ~9 Weeks
<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> <p>3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.¹</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-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-LS4-1. Analyze and interpret data from fossils to provide evidence of the organisms and the environments in which they lived long ago.¹</p> <p>3-ESS2-1. Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.¹</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-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-ESS2-2. Obtain and combine information to describe climates in different regions of the world.</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-ETS1-1. 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>3-5-ETS1-2. Generate and compare multiple possible solutions to a</p>

<p>3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.¹</p>			<p>problem based on how well each is likely to meet the criteria and constraints of the problem.¹</p>
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¹ The bundle only includes part of this PE; the PE is not fully assessable in a unit of instruction leading to this bundle.

