

2nd Grade Thematic Model

Narrative and Rationale: The three bundles in this Grade 2 model are characterized by the overarching theme that a “variety of objects, organisms, and systems are made up of parts”—an idea that applies to the physical, life, and Earth and space sciences, as well as engineering. Each of the three bundles also uses an engineering-related question to drive instruction.

The grade 2 Disciplinary Core Ideas (DCIs) in physical science focus on different kinds of matter and their observable properties and that some changes caused by heating and cooling can be reversed and some cannot. In Earth and space sciences, the DCI emphases are on wind and water, their roles in shaping the Earth’s surface, and how humans can limit their effects. Students also learn that some events on Earth occur very quickly, while others can occur very slowly. In the life sciences, the grade 2 DCIs emphasize the needs of plants, how they depend on animals for seed dispersal and pollination, and the diversity of life found in different habitats.

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 we design better products? ~ 9 weeks	Bundle 2: What kinds of solutions can help plants meet their needs? ~ 12 weeks	Bundle 3: How do we prevent wind or water from changing the land? ~ 9 weeks
<p>2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.</p> <p>2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.</p> <p>2-PS1-3. Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.</p> <p>K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.</p>	<p>2-PS1-4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.</p> <p>2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.</p> <p>2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.</p> <p>2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.</p> <p>2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.</p> <p>K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.</p>	<p>2-ESS1-1. Use information from several sources to provide evidence that Earth events can occur quickly or slowly.</p> <p>2-ESS2-1. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.</p> <p>2-ESS2-2. Develop a model to represent the shapes and kinds of land and bodies of water in an area.</p> <p>K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.</p>

