Grade 2 Next Generation Science Standards
Course Pacing Guide

Narrative and Rationale: The topic model in Grade 2 is divided into three bundles that build in complexity in terms of both disciplinary and crosscutting content, as well as the application of science and engineering practices across the year.

In Bundle 1, students can examine patterns of where water is found on the Earth in both solid and liquid forms, and patterns of where different kinds of plants and animals live on the land and in the water. In Bundle 2, students can examine how the land can change slowly or quickly by wind or water, and how different design solutions can affect these changes. In Bundle 3, students can explore the needs of plants and how animals and designed solutions can help meet plants' needs.

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.

Michigan Model Social and Emotional Health Safety ~ 2 weeks	Bundle 1 **Water** **~12 weeks**	Bundle 2 **Changes to Land** **~ 12 weeks**	Bundle 3 **The Needs of Plants** **~10 weeks**
Resources: MI Model http://www.spsd.net/wp-content/uploads/2018/03/SEX-ED-NEWSLETTER.pdf	**Pearson Resources** **Chapter 1**	**Pearson Resources** **Chapter 3**	**Pearson Resources** **Chapter 2**
Health Education What health habits and skills should we be practicing?	**Bundle Question** **What patterns related to water exist in the natural world?**	**Bundle Question** **Why does the land change over time?**	**Bundle Question** **What do plants need?**

Social/Emotional	NGSS Standards	NGSS Standards	NGSS Standards
Sept/Oct: Lesson #3 Lesson #4 **Safety Feb/March:** Lesson #4 Lesson #5 **For specific standards please refer to the Michigan Model for Health Manual Grade 2**	**2-PS1-1.** Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. **2-PS1-4.** Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot. **2-ESS2-2.** Develop a model to represent the state of Michigan and the Great Lakes, or a more local area and body of water. **2-ESS2-3.** Obtain information to identify where fresh water is found on Earth including the Great Lakes and the Great Lakes Basin. **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.	**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. **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. **2-ESS1-1.** Use information from several sources to provide evidence that Earth events can occur quickly or slowly. **2-ESS2-1.** Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land. **2-ESS2-2.** Develop a model to represent the state of Michigan and the Great Lakes, or a more local area and body of water. **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.	**2-LS2-1.** Plan and conduct an investigation to determine if plants need sunlight and water to grow. **2-LS2-2.** Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. **2-LS4-1.** Make observations of plants and animals to compare the diversity of life in different habitats. **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.

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