

Content: Science	Grade or Course: 2nd Grade	Date Developed: 8/18 Updated 10/11/19
<p>Overview: Students in second grade, have experiences in Life, Physical and Earth Science. Experiences are hands-on with many opportunities for students to apply the science practices within the specific fields of science.</p> <p><u>Life Science:</u> Students are expected to develop an understanding of what plants need to grow and how plants depend on animals for seed dispersal and pollination. Students are also expected to compare the diversity of life in different habitats.</p> <p><u>Physical Science:</u> Students develop an understanding of observable properties of matter through analysis and classification of different materials.</p> <p><u>Earth's Science:</u> Students are able to apply their understanding of the idea that wind and water can change the shape of the land to compare design solutions to slow or prevent such change. Students are able to use information and models to identify and represent the shapes and kinds of land and bodies of water in an area and where water is found on Earth.</p> <p>In the second-grade performance expectations, students are expected to demonstrate grade-appropriate proficiency in developing and using models, planning and carrying out investigations, analyzing and interpreting data, constructing explanations and designing solutions, engaging in argument from evidence, and obtaining, evaluating, and communicating information.</p>		
<p>Essential Questions:</p> <p>Life Science Essential Questions:</p> <ul style="list-style-type: none"> ● What do plants need to grow? ● What plants and animals live in different habitats? (Woodlands, African Savannah, Maine's Rocky Coast) ● What role do animals play in seed distribution and pollination? <p>Physical Science Essential Questions (Matter):</p> <ul style="list-style-type: none"> ● What is matter? ● How do scientists classify matter? ● How do the properties of matter determine their use? ● How does matter change? <p>Earth's Science Essential Questions:</p>		

- How does land change and what are some things that cause it to change?
- What are the different kinds of land and bodies of water?

EO's addressed to proficiency level:

Asking questions and defining problems:

- Ask questions based on observations to find more information about the natural and/or designed world.
- Ask and/or identify questions that can be answered by an investigation.
- Define a simple problem that can be solved through the development of a new or improved object or tool

Standards:

Interdependent Relationships in Ecosystems:

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.

Structures and Properties of Matter:

2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

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-PS1-4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.

Earth's Systems:

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 shapes and kinds of land and bodies of water in an area.

2-ESS2-3. Obtain information to identify where water is found on Earth and that it can be solid or liquid.

Units:

- **Maine Woodlands (Plants & Animals) - Life Science**
- **Solid, Liquid, Gas (Matter) - Physical Science**
- **Ocean Ecosystem & Landforms - Earth Science**

Assessments:

<https://www.matchfishtank.org/curriculum/science-and-social-studies/2nd-grade-science-social-studies/properties-of-matter/#lessons>

Oceans

Plants and Animals