

<b>Select a Course:</b>	Science Grade 2
<b>Teacher:</b>	CORE Science Grade 2
<b>Course:</b>	Science Grade 2
<b>Year:</b>	2016-17
<b>Months:</b>	- All -

August

Enduring Understandings ✕ Essential Questions ✕ Standards ✕ Knowledge & Skills ✕ Academic Language ✕

September

**Grade 2 Ecosystems** Interdependent Relationships in Ecosystems

Big Idea/Concept: Plants and animals depend on their ecosystem for survival

Enduring Understandings ✕ Essential Questions ✕ Standards ✕ Knowledge & Skills ✕ Academic Language ✕

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 expected to compare the diversity of life in different habitats.

How are plants smart?

How do habitats meet the needs for living things in their environment?

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.LS2.A - Interdependent relationships in ecosystems ~ Plants depend on water and light to grow, and also depend on animals for pollination or to move their seeds around.

Plants depend on water and light to grow.

Plants depend on animals for pollination or to move their seeds around.

There are many different kinds of living things in an area and they exist in different places in land and in water.

Students will provide evidence that plants and animals live in habitats that meet their needs.

- Tier 1 survival - M
- plants - M
- animals - M
- grow - M
- environment - M
- depend - IN
- observe - M
- compare - IN
- difference - IN
- similarity - IN
- roots - M
- stem - M
- wetland - M
- desert - M
- habitat - M
- seed dispersal - M
- pollination - M

				<ul style="list-style-type: none"> <li> grassland - M</li> <li> <b>Tier 2</b> variable - IN</li> <li> controlled variable - IN</li> <li> pollination - IN</li> <li> adaptations - IN</li> <li> nutrient - IN</li> </ul>	
October	<p><b>Enduring Understandings</b> ✕</p>	<p><b>Essential Questions</b> ✕</p>	<p><b>Standards</b> ✕</p>	<p><b>Knowledge &amp; Skills</b> ✕</p>	<p><b>Academic Language</b> ✕</p>
November	<p> <b>Matter and Stability</b> Matter and Stability</p> <p>Big Idea/Concept: Matter makes up everything.</p> <p>Masterwork: The 3 Little Pigs</p>				
	<p><b>Enduring Understandings</b> ✕</p> <ul style="list-style-type: none"> <li> Students will understand that everything is made of matter and can change</li> <li> Students will understand that matter can be identified by its properties</li> <li> Students will understand that not all matter changes in the same way</li> <li> Students will understand that changes can occur and affect our surroundings</li> </ul>	<p><b>Essential Questions</b> ✕</p> <ul style="list-style-type: none"> <li> What information about the properties of matter can be gathered by observation?</li> <li> How are materials used for different purposes?</li> <li> How can materials be reused?</li> <li> What happens when materials change states of matter?</li> </ul>	<p><b>Standards</b> ✕</p> <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>2-PS1.4 - Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.</p>	<p><b>Knowledge &amp; Skills</b> ✕</p> <ul style="list-style-type: none"> <li> Compare and contrast the states of matter.</li> <li> Classify objects according to forms of matter</li> <li> Classify objects based on more than one property</li> <li> Recognize how scientists gain information about states of matter through observation</li> <li> Conduct investigations</li> </ul>	<p><b>Academic Language</b> ✕</p> <ul style="list-style-type: none"> <li> Classify - M</li> <li> Investigate - M</li> <li> Describe - M</li> <li> Effect - IN</li> <li> Observe - M</li> <li> Analyze - IN</li> </ul>
					<ul style="list-style-type: none"> <li> Physical Changes - M</li> <li> Evaporate - IN</li> <li> Condensation IN</li> </ul>

							<ul style="list-style-type: none"> <li> Chemical Change/ properties - IN</li> <li> Boil - IN</li> <li> Texture - M</li> <li> Freeze - M</li> <li> Heat - M</li> <li> Melt - M</li> <li> Solid, liquid, gas - M</li> <li> Stability- M</li> <li> Water Vapor - IN</li> </ul>
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December	Enduring Understandings ✕	Essential Questions ✕	Standards	✕	Knowledge & Skills ✕	✕	Academic Language ✕
January	Enduring Understandings ✕	Essential Questions ✕	Standards	✕	Knowledge & Skills ✕	✕	Academic Language ✕
February	Enduring Understandings ✕	Essential Questions ✕	Standards	✕	Knowledge & Skills ✕	✕	Academic Language ✕

March	<p> <b>Grade 2 Earth's Systems: Processes that Shape the Earth</b> Earth's Systems: Processes that Shape the Earth</p> <p style="text-align: center;">Big Concept: Earth's Changes</p>						
	Enduring Understandings ✕	Essential Questions ✕	Standards	✕	Knowledge & Skills ✕	✕	Academic Language ✕
	<ul style="list-style-type: none"> <li> Students will understand that events on Earth can happen quickly or slowly.</li> <li> Students will understand that wind and water can change the shape of the land.</li> </ul>	<ul style="list-style-type: none"> <li> How does the interaction of air, water, and earth shape the surface?</li> <li> What connections are there between the changing surface of the Earth and the</li> </ul>	<ul style="list-style-type: none"> <li>2-ESS1.1 - Use information from several sources to provide evidence that Earth events can occur quickly or slowly.</li> <li>2-ESS2.1 - Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.*</li> <li>2-ESS2.2 - Develop a model to represent</li> </ul>	✕	<ul style="list-style-type: none"> <li> The Earth is a System of Systems</li> <li> Life, including human life, influences and is influenced by the environment.</li> <li> Changes in the</li> </ul>	✕	<ul style="list-style-type: none"> <li> <b>Tier 1</b> Earth</li> <li> volcanic eruptions</li> <li> dike</li> </ul>

	<p> Students will understand that maps show where things are located.</p>	<p>evolution of life?</p> <p> What interactions create our climate? How are they changing?</p>	<p>the shapes and kinds of land and bodies of water in an area.</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>Earth system happen gradually, sometimes too slow to see, and rapidly.</p>	<p> dam</p> <p> windbreak</p> <p> erosion</p> <p> solid</p> <p> liquid</p> <p> landform</p> <p> phenomena</p> <p> natural</p> <p> solution</p>	
April	Enduring Understandings 	Essential Questions 	Standards		Knowledge & Skills 	Academic Language 
May	Enduring Understandings 	Essential Questions 	Standards		Knowledge & Skills 	Academic Language 
June	Enduring Understandings 	Essential Questions 	Standards		Knowledge & Skills 	Academic Language 
July	Enduring Understandings 	Essential Questions 	Standards		Knowledge & Skills 	Academic Language 