



<b>Course: Science</b> <b>Grade:2</b> <b>Designer(s): Julie Andrews</b>	<b>Overview of Course</b> (Briefly describe what students should understand and be able to do as a result of engaging in this course): <b>Students will gain an understanding of the basic knowledge of Life, Earth, Physical, and Space &amp; Technology Science</b>
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**Overarching Big Ideas, Enduring Understandings, and Essential Questions**  
 (These “spiral” throughout the entire curriculum.)

<b>Systems and Investigations</b>			
<b>Big Idea</b>	<b>Standard(s) Addressed</b>	<b>Enduring Understanding(s)</b>	<b>Essential Question(s)</b>
1.Systems	3.1.A. Know that natural and human-made objects are made up of parts.	<ul style="list-style-type: none"> <li>• Plants and animals are made up of different parts.</li> </ul>	What are the different parts of a plant? What are the parts of an animal?
	3.1.E. Recognize change in natural and physical systems.	<ul style="list-style-type: none"> <li>• Heat, cold, and light change an object.</li> </ul>	How does heat change and object? How does cold change and object? How does light change and object?
	3.5.D. Recognize the earth’s different water resources.	<ul style="list-style-type: none"> <li>• The earth contains different bodies of water.</li> </ul>	What are the different bodies of water?
	4.1.C. Identify living things found in water environments	<ul style="list-style-type: none"> <li>• Living things are found in water.</li> </ul>	What are some living things found in water?

2. Patterns	3.1.C. Illustrate patterns that regularly occur and reoccur in nature.	<ul style="list-style-type: none"> <li>Weather patterns are caused by changes.</li> </ul>	How does the weather change?
3. Classification	3.3.A. Know the similarities and differences of living things.	<ul style="list-style-type: none"> <li>Plants and animals have basic needs for survival.</li> </ul>	<p>What does a plant need to survive?</p> <p>What does an animal need to survive?</p>
4. Investigation	3.1.C. Illustrate patterns that regularly occur and reoccur in nature.	<ul style="list-style-type: none"> <li>Weather changes.</li> <li>There are four seasons.</li> </ul>	How does the weather change? How do the seasons change?
	3.2.B. Describe objects in the world using the five senses.	<ul style="list-style-type: none"> <li>Living things have senses</li> </ul>	<p>How does an object look? How does it taste? How does it feel? How does it sound? How does it smell?</p> <p>How can you use your five senses to describe an object?</p>
	3.2.C. Recognize and use the elements of scientific inquiry to solve problems.	<ul style="list-style-type: none"> <li>Use observations from experiments and investigations to form a conclusion.</li> </ul>	What happened?
5. Cycles	4.2.D. Identify by-products and their use of natural resources	<ul style="list-style-type: none"> <li>Some items can be recycled while others cannot.</li> </ul>	What can be recycled? ie. paper, plastic, cardboard, aluminum, metal
6. Changes	3.3.D. Identify changes in living things over time.	<ul style="list-style-type: none"> <li>Living things change over time.</li> </ul>	How do living things change over time?
	3.5.C. Know basic weather elements	<ul style="list-style-type: none"> <li>Seasons affect plants and animals.</li> </ul>	How are plants affected by the changes in the seasons? How are animals affected by the changes in the seasons?
	4.1.B. Explain differences between moving and still water	<ul style="list-style-type: none"> <li>There are different types of precipitation.</li> </ul>	What is snow? What is rain? What is sleet? What is hail?
7. Properties	3.4.A. Recognize basic concepts about the structure and properties of matter.	<ul style="list-style-type: none"> <li>The three states of matter are solid, liquid, or gas.</li> </ul>	What is a solid? What is a liquid? What is a gas?

**Big Ideas, Enduring Understandings, and Essential Questions Per Unit of Study**

(These do NOT “spiral” throughout the entire curriculum, but are specific to each unit.)

Month of Instruction	Title of Unit	Big Idea(s)	Standard(s) Addressed	Enduring Understanding(s)	Essential Question(s)	Common Assessment(s)*	Common Resource(s)* Used
August							
September							
October							
Winter (late November – early March)	<b>Changes</b>	<b>Systems</b>	3.1.E. Recognize change in natural and physical systems.	<ul style="list-style-type: none"> <li>Water temperature can cause different results.</li> </ul>	How does hot water change the outcome? How does cold water change the outcome?	Science Notebooks	Changes Kit
		<b>Investigations</b>	3.2.C. Recognize and use the elements of scientific inquiry to solve problems.	<ul style="list-style-type: none"> <li>Use observations from experiments and investigations to form a conclusion.</li> </ul>	What happened?		
			3.2.B. Describe objects in the world using the five senses.	<ul style="list-style-type: none"> <li>Living things have senses</li> </ul>	How does an object look? How does it feel? How does it sound? How does it smell?		
		<b>Properties</b>	3.4.A. Recognize basic concepts about the structure and properties of matter.	<ul style="list-style-type: none"> <li>The three states of matter are solid, liquid, or gas.</li> </ul>	What is a solid? What is a liquid? What is a gas?		
Spring (late March – May)	<b>Life Cycle of Butterflies</b>	<b>Systems</b>	3.1.A. Know that natural and human-made objects are made up of parts.	<ul style="list-style-type: none"> <li>Insects are made up of different parts.</li> </ul>	What are the different parts of a butterfly?	Science Notebooks	Life Cycle of Butterflies Kit
		<b>Classification</b>	3.3.A. Know the similarities and differences of living things.	<ul style="list-style-type: none"> <li>Living things have basic needs for survival.</li> </ul>	What does a butterfly need to survive?		
		<b>Changes</b>	3.3.D. Identify changes in living things over time.	<ul style="list-style-type: none"> <li>Living things change over time.</li> </ul>	How do living things change over time?		
June							