Course: Science **Grade:2**	**Overview of Course** (Briefly describe what students should understand and be able to do as a result of engaging in this course)**: Students will gain an understanding of the basic knowledge of Life, Earth, Physical, and Space & Technology Science**

Overarching Big Ideas, Enduring Understandings, and Essential Questions
(These "spiral" throughout the entire curriculum.)
Systems and Investigations

Big Idea	Standard(s) Addressed	Enduring Understanding(s)	Essential Question(s)
1.Systems	3.1.A. Know that natural and human-made objects are made up of parts.	• Plants and animals are made up of different parts.	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.	• Heat, cold, and light change an object.	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.	• The earth contains different bodies of water.	What are the different bodies of water?
	4.1.C. Identify living things found in water environments	• Living things are found in water.	What are some living things found in water?

2. Patterns	3.1.C. Illustrate patterns that regularly occur and reoccur in nature.	• Weather patterns are caused by changes.	How does the weather change?
3. Classification	3.3.A. Know the similarities and differences of living things.	• Plants and animals have basic needs for survival.	What does a plant need to survive? What does an animal need to survive?
4. Investigation	3.1.C. Illustrate patterns that regularly occur and reoccur in nature.	• Weather changes. • There are four seasons.	How does the weather change? How do the seasons change?
	3.2.B. Describe objects in the world using the five senses.	• Living things have senses	How does an object look? How does it taste? How does it feel? How does it sound? How does it smell? How can you use your five senses to describe an object?
	3.2.C. Recognize and use the elements of scientific inquiry to solve problems.	• Use observations from experiments and investigations to form a conclusion.	What happened?
5. Cycles	4.2.D. Identify by-products and their use of natural resources	• Some items can be recycled while others cannot.	What can be recycled? ie. paper, plastic, cardboard, aluminum, metal
6. Changes	3.3.D. Identify changes in living things over time.	• Living things change over time.	How do living things change over time?
	3.5.C. Know basic weather elements	• Seasons affect plants and animals.	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	• There are different types of precipitation.	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.	• The three states of matter are solid, liquid, or gas.	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 August	**Title of Unit**	**Big Idea(s)**	**Standard(s) Addressed**	**Enduring Understanding(s)**	**Essential Question(s)**	**Common Assessment(s)***	**Common Resource(s)* Used**
September							
October							
Winter (late November – early March	**Changes**	**Systems**	3.1.E. Recognize change in natural and physical systems.	• Water temperature can cause different results.	How does hot water change the outcome? How does cold water change the outcome?	Science Notebooks	Changes Kit
		Investigations	3.2.C. Recognize and use the elements of scientific inquiry to solve problems.	• Use observations from experiments and investigations to form a conclusion.	What happened?		
			3.2.B. Describe objects in the world using the five senses.	• Living things have senses	How does an object look? How does it feel? How does it sound? How does it smell?		
		Properties	3.4.A. Recognize basic concepts about the structure and properties of matter.	• The three states of matter are solid, liquid, or gas.	What is a solid? What is a liquid? What is a gas?		
Spring (late March – May)	**Life Cycle of Butterflies**	**Systems**	3.1.A. Know that natural and human-made objects are made up of parts.	• Insects are made up of different parts.	What are the different parts of a butterfly?	Science Notebooks	Life Cycle of Butterflies Kit
		Classification	3.3.A. Know the similarities and differences of living things.	• Living things have basic needs for survival.	What does a butterfly need to survive?		
		Changes	3.3.D. Identify changes in living things over time.	• Living things change over time.	How do living things change over time?		
June							