Kindergarten Unit1a: Weather, Seasons, and Energy Duration: 4 weeks (October) Unit 1b: The Sun/Energy Duration: 4 weeks (December/January)

Desired Results

Performance Expectations(standards):

K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time. [Clarification Statement: Examples of qualitative observations could include descriptions of the weather (such as sunny, cloudy, rainy, and warm); examples of quantitative observations could include numbers of sunny, windy, and rainy days in a month. Examples of patterns could include that it is usually cooler in the morning than in the afternoon and the number of sunny days versus cloudy days in different months.]

K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to severe weather. [Clarification Statement: Emphasis is on local forms of severe weather.]

K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface [Clarification Statement: Examples of Earth's surface could include sand, soil, rocks, and

Meaning ENDURING UNDERSTANDINGS: Crosscutting Concepts Students will understand ...

- Events have causes that generate observable patterns.
- Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.

Transfer

- Temperature changes throughout the day are a pattern in the natural world.
- The cause and effect relationship between sunlight exposure and the temperature on Earth's surface.
- The cause and effect relationship between the amount of sunlight an area gets and its temperature.
- Seasons follow a pattern. They will determine the order of the seasons and notice the pattern that all four seasons repeat each year.
- Weather follows a pattern. Students will explore the cause and effect relationship between weather tracking and hazard preparation.

	Meaning		
ne the arth's and	Acquisition Disciplinary Core Ideas Students will know • Sunlight warms Earth's surface. (K-	 Science and Engineering Practices Students will be skilled at Ask questions based on observations to find more information about the 	

water.] K-PS3 - 2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area. [Clarification Statement: Examples of structures could include umbrellas, canopies, and tents that minimize the warming effect of the sun.]	 PS3-1),(K-PS3-2) Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (K-ESS2-1) Some kinds of severe weather are more likely than others in a given region. Weather scientists forecast severe weather so that the communities can prepare for and respond to these events. (K-ESS3-2) Asking questions, making observations, and gathering information are helpful in thinking about problems. (secondary to K-ESS3-2) 	 designed world. (K- ESS3-2) Make observations (firsthand or from media) to collect data that can be used to make comparisons. (K-PS3-1) Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (K-ESS2-1) Use tools and materials provided to design and build a device that solves a specific problem or a solution to a specific problem. (K-PS3-2) Read grade-appropriate texts and/or use media to obtain scientific information to describe patterns in the natural world. (K-ESS3-2) Scientists use different ways to study the world. (K-PS3-1) Scientists look for patterns and order when making observations about the world. (K-ESS2-1) 	
	Evidence		
Evaluation Criteria	Assessment Evidence		
Resources: • Tara West Kinder Science Unit 2 • Little Thinkers Science Unit 2 • Mystery Science "Weather Watching" Unit	PERFORMANCE TASK(S): Build a Shade Structure - Resource by Sue Cahalane <u>https://www.teacherspayteachers.com/Product/Building-Shade-Structures-Aligns-with-NGSS-K-PS3-2-K-2-ETS1-1-K-2-ETS1-2-1728167</u>		

	OTHER EVIDENCE: • Seasons Unit Assessment • Seasons Art Project • Weather Journal • Meteorologist Visit	
Learning Plan		
Summary of Key Learning Events and Instruction		