



<p>1. What is our purpose?</p> <p>To inquire into the following:</p> <ul style="list-style-type: none"> - Transdisciplinary Theme <p>How the world works - (The Sun)</p> <ul style="list-style-type: none"> - Central Idea: <p>The sun's energy causes changes to living and nonliving things on earth.</p>	<p>Class/grade: Kindergarten Age group: 5-6 yrs</p> <p>School: Willard School code: 7202</p> <p>Title: Sun</p> <p>Teacher(s): Covarrubias, Katsafados, Magalong, Marquez, Munro, Wood</p> <p>Date: 2/20/18 - 3/30/18</p> <p>Proposed duration: 90 hours 5 weeks</p>
<p>1b. Summative assessment task(s):</p> <p>What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?</p> <p>Students will demonstrate their understanding of the central idea by completing a project related to the sun how it works or affects conditions on the earth.</p> <p>Teacher will assess students' ability to demonstrate how the sun's energy causes changes that impact the world and it's inhabitants, the sun's connection to weather, and a design solution to adapt or work with that condition.</p> <p>Through the study of this unit the students will demonstrate personal action such as:</p> <ul style="list-style-type: none"> ● They might want study on their own about topics of interest related to the unit of study. ● They may become more curious about the sun, its patterns, shadows, and become more observant - do independent research. ● They might want to investigate why the sun moves and how it affects temperature. ● They may become interested in weather conditions ● They may investigate weather patterns over time ● They may chose to take action helping others who have experiences tragedies due to natural disasters ● They might design ways to lower the temperature by designing/creating structures 	<p>2. What do we want to learn?</p> <p>What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?</p> <p>Key Concepts :Form, change, connection Related Concepts: cycles</p> <p>Subject area focuses: science, social studies, language</p> <p>What lines of inquiry will define the scope of the inquiry into the central idea?</p> <ul style="list-style-type: none"> ● The sun's energy ● Types of weather ● Design solutions for weather conditions <p>What teacher questions/provocations will drive these inquiries?</p> <ol style="list-style-type: none"> 1. What does the sun do for us? 2. How does the sun affect weather? 3. What are the different weather conditions? 4. How do we respond to different types of weather? 5. How can we design structures to reduce the warming effect of sunlight on an area? <p>Provocations/ unit openers</p> <ol style="list-style-type: none"> 1. Design a solution to a problematic scenario: It is too hot and we need to design a way to lower the temperature: "design and build a structure that will reduce the warming effect of sunlight on an area" 2. OTQ: Observe, think question as look at different pictures of different weather conditions, the dry cracked ground, sunny, shady, or wet locations.

<p>3. How might we know what we have learned?</p> <p><i>This column should be used in conjunction with "How best might we learn?"</i></p> <p>What are the possible ways of assessing students' prior knowledge and skills? Prior knowledge will be assessed through group discussions and graphic organizers</p> <p>What evidence will we look for? Teacher will look for students to share their knowledge through class discussions and and participation in the creation of graphic organizers.</p> <p>What are the possible ways of assessing student learning in the context of the lines of inquiry? What evidence will we look for?</p> <p>Students can identify the sun cycles and patterns within their world. Students will describe the cycle of day and night. Students will understand that shelter can provide relief from the sun's heat. Students will describe how the sun affects weather patterns.</p>	<p>4. How best might we learn?</p> <p>What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?</p> <ol style="list-style-type: none"> 1. Teacher/students will read a variety of books about the sun and how it affects the world. 2. Student/teacher will use and share observations of local weather conditions to describe patterns over time. 3. Teacher/ students will explore vocabulary words such as sun, earth, energy, storm, sunny, cloudy, rainy, warm, temperature, morning, afternoon, windy, cooler, warmer, living, non-living, erosion. 4. Student/teacher will use tools and materials to design and build a structure that will reduce the warming effect of the sun. 5. Student/teacher will discuss ways to prepare for and respond to severe weather conditions. <p>What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?</p> <p><u>Transdisciplinary skills:</u> <u>Social Skills:</u> Students will accept responsibility and show cooperation as they work together to solve problems and make decision regarding the environment.</p> <p><u>Thinking Skills:</u> Students will use acquisition of knowledge and application skills to construct a shelter in order to evaluate the changes in temperature.</p> <p><u>Research Skills:</u> Students will observe, question, and interpret data and present findings of their experiments.</p> <p><u>Learner Profile:</u> Thinker- students' research will center around the sun's energy and types of weather and they will apply new knowledge to their design solutions to weather conditions. Knowledgeable - as students learn about the sun, its makeup, and how it affects the earth's inhabitants. Principled- students will learn how to protect themselves from the sun and environment</p> <p><u>Attitudes:</u> Commitment- students will be able to commit to taking care of the earth and ways how</p>
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<p>5. What resources need to be gathered?</p> <p>What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available? * Brainpopjr.com, Sun up, Sun down by Gail Gibbons, Sadie and the Snowman by Allen Morgan, Jump into Science: Sun by Steve Tomecek, guided readers: Our Sun, We Need the Sun, outdoor garden (shows patterns of ecosystem). All About the Sun (science media)</p> <p>How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry? The classroom will provide books, realia, pictures, and videos for students to explore and discover facts about the sun and its effect on weather. Students will engage in outdoor activities that connect their prior knowledge to weather throughout seasons. Our daily weather provides vast resources for students to explore and discover and bring their knowledge into the classroom.</p>
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