

SUBJECT: Science

UNIT: <u>3</u>

COURSE: _____1st

TEACHER: <u>Angle Katherinn Montoya Rodriguez</u>

TITLE:

Types of light - natural and artificial light - sunlight - sounds

THROUGHLINES:

- 1. What is white light composed by?
- 2. Is the Sun a giant lamp?
- Can we make light without electricity?
 Why do we see shadows when there is sunlight?
 How is sound produced?

GENERATIVE TOPIC

EcoSun Builders

UNDERSTANDING GOALS:

	UNDERSTANDING PERFORMANCES	TIME	ASSESSMENT	
	ACTIONS		WAYS	CRITERIA
Exploration Stage	 -To identify the concept of light. -To identify different objects that emit light. -To identify how white light is composed. -To Identify the shadow as the result when light is obstructed -To identify different sources of light. -To identify natural or artificial light. -To identify the Sun as a natural source of light and heat. -To identify how the Sun affects life on Earth. Synthesis project: Week 1: Project Presentation Week 2: Talk about Sustainable Living Week 3: Recognizing Solar Energy as a Source of Power Week 4: Prototype Presentation 	4 Weeks	 -Reading about light to discover new vocabulary. -Creating a book flap of the light. -Using pictures of different elements of light. -Solving a word search about light. -Comparing artificial and natural light. -Completing a mind map about light. -Matching some pictures with their shadow. -Completing a mind map about the importance of the sun. -Reading a book about the characteristics of the sun. 	-Recognize the concept of light and the correct classification of light sources.

Guided Stage	 -To recognize sounds in the environment. -To Identify and classify sounds as soft/loud and long/short. -To classify sounds by volume and duration. -To explore how sound is created by vibrations. Synthesis project: Week 5: Collecting Recyclable Materials Week 6: Building the Panel Structure 	2 weeks	 -Recognizing vocabulary related to sound. -Classifying soft and loud sounds. -Using a sorting mat: "Soft / Loud" and "Short / Long." -Completing sentences using soft or loud sound. -Listening to the sounds of the outer space. -Creating simple instruments (shakers, rubber band guitar, drum) using recycled materials. -Solving a word search using vocabulary related to the sound. 	-Establish the difference between soft and loud sounds.
Learning Evidence	Synthesis project name and brief description. There is a growing awareness of the need to take care of the planet, which is why it is essential for children to learn from an early age to value natural energy sources and to use them consciously. This project aims to introduce students to the concept of solar energy through practical, creative, and fully hands-on activities. Children will explore their surroundings, identify the Sun as a constant and natural source of energy, learn about recycling, and reuse materials to build a functional model of a solar panel using discarded materials. From the science area, students will recognize the concept of light, the types of energy, and especially sunlight, which we can harness for our daily activities. Steps: Week 7: Checking Functionality Week 8: Prototype Simulation Presentation	2 weeks	 -Introducing the name and objective of the project -Talking about the ODS related to the project. -Introducing solar energy and its importance through videos, images, and a class conversation. -Reading about the sun and it characteristics. -Talking about Sustainable Living. -Bringing recycled items (cardboard, bottles, caps, CDs, etc.). They classify and evaluate materials for reuse. -Building the base and the frame of the solar panel using recycled materials. 	-Recognizes the importance of using clean energy.