\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**How is Solar Energy a developing solution for human energy consumption?**

NGSS Core Question: ETS1B: Engineering Design

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Instructional Objectives***Students will be able to* | **Learning Outcomes***Students will demonstrate the measurable abilities* | **Standards***Students will address* |
| IO1: Describe how solar energy technology can have deep impacts on society and the environment by comparing real-world examples of solar technology on Earth and in Space. | LO1: Explain how photoelectric materials emit electrons when they absorb light of a high-enough frequency by examining electromagnetic properties and identifying visible lights place in the spectrum. (PS4.B)LO2: Analyze the ways in which solar energy technology helps to solve real-world energy resources and climate change problems by describing the problem, matching it with a solar technology solution, and listing potential secondary & tertiary impacts. (HS-ESS3-4) | **PRACTICES:**1. Constructing Explanations and Designing Solutions
2. Obtaining, Evaluating, and Communicating Information
3. Engaging in Argument from Evidence Scientific Knowledge is based on Empirical Evidence

**DISCIPLINARY CORE IDEAS:*** ETS1.B: Engineering Design
* PS3.B: Conservation of Energy and Energy Transfer
* ESS3.C: Human Impacts on Earth Systems

**CROSSCUTTING CONCEPTS**1. Influence of Science, Engineering, and Technology on Society and the Natural World.
 |