

# SOLAR EDUCATION IN PHILLY

## FIELD SITE: PHILADELPHIA SOLAR ENERGY ASSOCIATION

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### WHAT IS PHILADELPHIA SOLAR ENERGY ASSOCIATION?

Philadelphia Solar Energy Association is a non-profit founded in 1980 with the goal of promoting solar energy across the state of Pennsylvania.

### DESIGNING SOLAR KITS

Worked with PSEA, Drexel students, and Drexel Engineering Department faculty to design a kit for middle school classrooms utilizing old solar panels

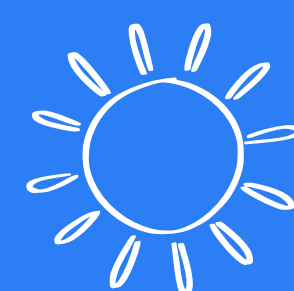
### RESEARCHING EXISTING CURRICULA

- Develop a list of 9 existing solar curricula and 10 solar education kits targeting middle school science classes
- Analyze each kit and curricula for content, replicability, and focus on hands-on learning
- work with a Drexel student to provide list of top 3 curricula

### DEVELOPING LESSONS USING SOLAR KITS

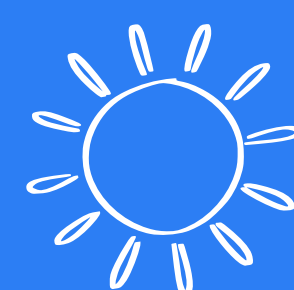
- compiled list and short descriptions of all STEELS Technology & Engineering Standards for grades 3-5 and 6-8 and all 6-8 grade Sustainability Standards
- Began drafting lesson plans aligning with STEELS 3-5 grade Technology & Engineering Standards

### LEARNING OBJECTIVES



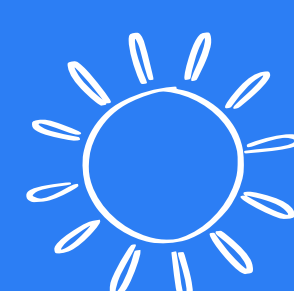
#### LEARNING OBJECTIVE 1

The student will be able to identify changes in Pennsylvania Science Standards



#### LEARNING OBJECTIVE 2

The student will be able to develop lesson plans that adhere to the new state science sustainability standard.



#### LEARNING OBJECTIVE 3

The student will be able to assist in teacher development trainings for new science curriculum.



#### LEARNING OBJECTIVE 4

The student will be able to compare changes in teaching practices outlined in the new standards to best practices described in course readings.

### WHAT ARE THE NEW STEELS STANDARDS?

- Stands for: Science, Technology & Engineering, Environmental Literacy and Sustainability
- Every public school district in PA has to adopt curriculum aligning with the standards by July 1

### ACKNOWLEDGEMENTS

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