



### Overview

Topic	Introduction to Solar Energy	Date	
Grade Level	K-2	Presenter	
School		Teacher	

### Goal

Inspire and motivate students to think about ways to harness the sun as an energy source. Provide an overview of different forms of renewable energy. Help students to imagine a world that uses more clean and renewable energy sources, and have fun!

#### Timeline: 50 minute class

Ice Breaker / Introduction - 10  
 Presentation - 15  
 Classroom Activity - 15  
 Games - 10

#### Materials

Printed photos of types of electricity generation.  
 Photocopied coloring pages.

### Icebreaker / Introduction

Today, we are going to learn about solar energy. This means using a *solar panel* to capture energy from the sun. Let's play a game to see how this works.

#### Solar Game

Imagine that you are a tiny part of a solar panel. When the sun is shining, you can take energy from the sun. You get energized, and you and your friends can pass that energy into the house's electric system. When it is cloudy, you do not have as much energy. And when it is night time, you have no energy!

When I say "Sunshine!", stand and wave your hands in the air. You have so much energy to send along!

When I say "Cloudy!", sit in your chair and wave your hands a little less. You do not have as much energy.

When I say "Night time!", sit in your chair and "go to sleep". The solar electric system is not producing any energy.

Students can take turns playing the part of the Sun, and saying the words to cue their classmates.

### Presentation / Core Content

- What makes our lights, TV, or computer work? What do we do at home that takes energy? What has an on/off switch?
- Where does electricity come from?
- What are some sources of energy?
- Can the sun be a source of energy?

Write out "solar electric system" on board, help students work through definition, how is it different from the way we usually get energy? Show a general diagram of a home solar electric system, and pass out the solar electric system coloring pages. Walk students through the numbered sections of the diagram, so they understand the flow of energy from the sun, through the solar system and home, and to the electric grid.

### Classroom Activities

#### Coloring Activities:

Students work alone or in groups on solar energy coloring and drawing activities.

Recommended coloring pages are listed in the Additional Resources section.

### Conclusion

Ask students to share something they learned from the games and activities, or show the drawing that they have colored. Ask questions about the coloring pages to check for understanding.