

## what is Solar Energy?

The sun has produced energy for billions of years. Unlike oil or coal solar energy is not a scarce resource, we don't really need energy to use it and it does not create pollution which makes it a so called "renewable" energy source.

People always have used solar energy to cook food, keep warm, and to dry food and clothes. Today, it is also used to create electricity.

Let's find out how strong the sun is and how we can use energy from the sun!

## For this experiment you will need:

2 Glass Jars or plastic cups the same size
Scissors
Glue Gun or Glue
Ice
Timer
Black and White Felt, Paper or Paint
Ruler
Water
Measuring Cup
Thermometer (optional)



## Instructions

- 1) Cover or Paint your glass jars (lids and base too). One White and one Black.
- 2) Add the same Amount and Temperature water to each jar. Fill about halfway.
- 3) Add the same Amount of ice cubes to each jar. (About 10)
- 4) Set the jars in the direct sun and set a timer for 5 Minutes.
  - Use the Solar Power Tracker on the next page to record what happens to the water and ice in each jar
    - How many ice cubes are left?
    - Did the temperature of the water change?
    - What else do you notice?
  - Set the timer for another 5 Minutes and check again.
    Repeat this process until the ice is melted.

0	which Jar Black or white melted first? why?			
0	What other ways could we use this Solar Power?			



## Solar Power Tracker



Time	White	Black
5 minutes		
10 minutes		
15 minutes		
20 minutes		