

TARWATER ELEMENTARY SCHOOL STEM LAB

Activity ID: T-6

Activity Name: Solar Oven Water Heater

MATERIALS:

Materials Provided in Bin:

Item:	Quantity:	Notes:
Lesson Plan		
Aluminum Foil		
Glass Jars	10	
Thermometer Gloves		

Materials In STEM Lab or Classroom (Common Items):

Item:	Quantity:	Notes:
Water		
Boxes		
Tape		
Black Paper		

Materials Teacher/Parents Need to Provide:

Item:	Quantity:	Notes:
None		

WHAT ARE WE DOING?

Making a solar oven water heater

VIDEOS / LINKS:

None identified

SAFETY NOTES:

Do under adult supervision

SCIENCE TERMS:

Solar, Reflection

STEPS:

First, make sure it is not cloudy.

Next, wrap the box properly with aluminum foil using tape

Wrap the glass jars with black paper on the outside.

Then, fill the glass jars with water and measure the initial temperature of the water.

Now, place the box in the sun and put the jar of water in the box

After one hour take the glass jar out of the box with gloves because it might be hot

Measure the temperature of the water

QUESTIONS TO ASK STUDENTS:

Did the temperature change and why?

If you could do this experiment different, what would you add or take out?

CLEAN-UP:

Into the Bin = lesson, glass jars, leftover boxes of aluminum foil, thermometer

Back to lab/Classroom = Rolls of tape

Trash/Recycle = Used boxes and tape

**IF RUNNING OUT OF A SUPPLY IN THE BIN, PLEASE
CONTACT LAURIE JONES IN THE OFFICE (X4307)
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