

## Solar S'Mores

In this activity, you and your child will create a solar oven to take home to make S'Mores. Solar ovens can reach temperatures of 275 degrees F inside. Solar ovens may be the wave of the future – they are economical and environmentally friendly because they don't use gas, electricity or wood!

### What You Need:

- One graham cracker broken in half
- One large marshmallow
- Half of a chocolate candy bar
- One small cardboard box
- Black construction paper
- Aluminum foil
- Clear plastic (Heavy plastic laminate works best)
- Non-toxic glue
- Tape
- Scissors
- Ruler
- Markers



### What to Do:

- Cut two pieces of aluminum foil to fit the box inside top and bottom.
- Cut and tape a piece of black paper to the foil on the box bottom
- Place two halves of a graham cracker on the bottom of the box
- On one graham cracker, place half a chocolate bar
- On the other graham cracker, place the marshmallow
- Cut a piece of clear plastic to cover the opening on top
- Tape the plastic to seal the box off – Make sure air cannot escape.
- Once you are home, place your oven outside facing the Sun. Open and tilt the top until it reflects the maximum amount of sunlight into your oven. Allow your S'More to cook for several minutes. - *Enjoy!*

### Parent Prompts:

What caused the chocolate and marshmallows to melt?  
(the Sun's energy – sunlight absorbed and converted to heat)

Would the chocolate and marshmallows have melted as quickly without the clear plastic cover? Why? (No; the plastic helps to trap the heat, similar to the way an oven does!)