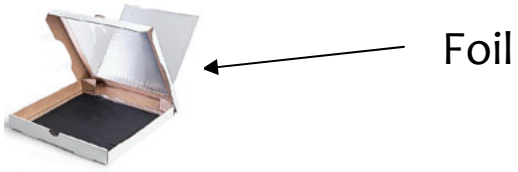
Now we're cooking!!!

Materials

- Large pizza box –we are using laptop boxes, but you won't have those at home!
- Pencil and ruler
- Craft knife or scissors
- Aluminum foil
- Scissors
- Glue stick
- Black construction paper
- Clear tape
- Clear plastic (plastic wrap)
- Graham crackers, chocolate bars, and marshmallows
- Stick or dowel or pencil

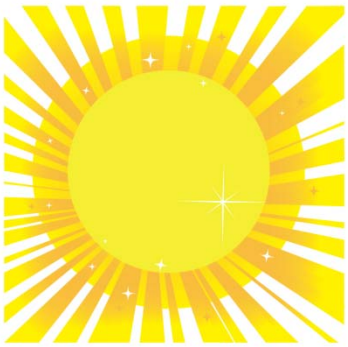
1. On the top of the pizza box, draw a square that is an inch or two smaller than the lid all the way around. Use the scissors to cut through the cardboard along **three** sides, as shown, and then fold the cardboard up along the uncut line to form a flap.
2. Glue or fold/tape aluminum foil, shiny side out, to the bottom of the flap, keeping it as wrinkle-free as you can. Why?



3. Glue another piece of foil to the inside bottom of the box, then tape black construction paper on top of the foil. Why?
4. Tape clear plastic to the underside of the lid to seal the opening created by the flap. For the best results, the seal should be as airtight as possible.
5. Place your oven outdoors in direct sunlight with the flap opened toward the sun. Or, as we are doing, line it up and direct the heat lamp toward the flap. For each s'more, center two graham crackers on the construction paper. Top one with chocolate and the other with a marshmallow. Close the box and then use a stick or dowel to prop the flap open at the angle that reflects the most heat into the box (check it periodically to adjust the angle).

Today we experimented with solar power—today is also **Introduce a Girl to Engineering Day**—explore these resources for more fun and information.

http://www.eweek.org/EngineersWeek/Introduce.aspx



http://www.solarpower.org/

http://www.scientificamerican.com/article.cfm?id=how-does-solar-power-work

http://science.nasa.gov/science-news/science-at-nasa/2002/solarcells/

http://www.eia.doe.gov/kids/energy.cfm?page=solar_home-basics

http://www.green-planet-solar-energy.com/solar-energy-education.html

http://www.going-green-challenge.com/solar-energy-for-kids.html