Solar Oven S’mores

Experiment Time: 40-60 Min (excludes set up time)

Experiment Link: https://learning-center.homesciencetools.com/article/how-to-build-a-solar-oven-project/

Ingredients:

- Shoe box with a lid (Pizza, Donut or Cake boxes should work too)
- A marker
- Scissors (or a box knife)
- Aluminum foil
- Clear tape
- Clear plastic wrap
- Black construction paper
- S’mores Materials: Graham crackers, marshmallows and chocolate (optional)
- At least 2 skewers (Anything to prop up the lid)
- Newspapers (optional)
- Thermometer (optional, to check internal temp)
- Oven Mitts (optional)

Directions:

- Use marker to draw out a flap that covers at least ¾ of the lid
- Use scissors to cut out flap (have an adult help if necessary)
- Line inside of box as well as the flap (from the inside) with aluminum foil and tape it down
- Cut out a piece of the black construction paper to fit the bottom of the box, then tape it down
- Tape out a sheet of plastic wrap to the inside of your boxes lid
- To create further insulation in your oven you can add rolled up newspaper to the inside of your box along with a thermometer to measure how hot the oven gets
- Make holes in the lid of your box to place your skewers so that they can prop the flap up at about a 45-degree angle (can use pens or pencils instead)

Notes:

- S’mores are the perfect treat to test out the oven but can try heating up other things like popcorn kernels!
- Perfect for record breaking hot days, use this in an area that is exposed to lots of sun
- Be careful, the oven can get relatively hot, oven mitts are recommended if available