

# How to Make a Solar Oven

A solar oven is a great way to cook in the outdoors in a way that doesn't add greenhouse gases to the environment.

## MATERIALS NEEDED:

- \*Cardboard pizza box
- \*Pencil
- \*Ruler
- \*Box cutter or scissors
- \*Aluminum foil
- \*Clear type of tape
- \*Black construction paper
- \*Plastic wrap or large, transparent plastic bag
- \*Newspapers
- \*Oven mitt
- \*Dish or pie plate
- \*Cooking Ingredients, like those for some mores or nachos  
**(don't use your oven to prepare raw meat)**
- \*Optional: a thermometer that goes up to 250 degrees F.



## EXPERIMENT PROCESS:

- \*Clean any stray bits of cheese, sauce or crumbs out of your pizza box.
- \*Using the ruler and pencil, draw a square one inch in from the edges of the top of the box .
- \*Use the box cutter or knife to cut out three of the four sides of the square.
- \*Make a crease along the uncut side of the square to create a flap that stands up.
- \*Cut a piece of aluminum foil large enough to cover the inner side of the cardboard flap.
- \*Wrap the foil tightly, and secure with tape.
- \*Line the bottom of the pizza box with black construction paper.
- \*Cut two pieces of plastic wrap that are the same size as the top of the pizza box.
- \*Use tape to secure the plastic wrap to the inside edges of the square window you cut into the box. You are creating an airtight window.
- \*Roll up some newspaper pages into tubes to stuff into the sides of the box. Make sure you are still able to close the lid of the pizza box.
- \*Now it is time to cook something! The best time to use your oven is between 11 AM and 2 PM.
- \*Make sure to set the food on a dish so you don't mess up the interior of your oven.

One food option is a “solar s'more”. Place one or two marshmallows on top of a graham cracker. Put two to three squares of chocolate on top of the marshmallow. Wait until it's done cooking to top it with the second graham cracker.

You can also make nachos by placing grated cheese on top of tortilla chips, or use the oven to heat up leftovers or soup.

**Results:** On a sunny, warm day, your oven could reach about 200 degrees F. You will notice that food takes longer to cook in a solar oven than a regular one.