



Build Your Own Solar Oven



You may have seen the solar oven outside Reginald's house.
Now it's your turn to build one.

Here are the supplies you'll need:

- A clean pizza box or shoe box with a hinged lid
- Marker
- Scissors
- Tape
- Glue stick
- Ruler or stick
- Black paper
- Tinfoil
- Plastic wrap
- Newspaper or fabric
- A pie plate
- Something to cook - s'mores, a hot dog, nachos, toast, cheese
- Oven mitts

Let's get started!

1. On the closed box, draw a rectangle on the lid an inch or two in from the edge, other than the edge at the hinge.
2. Cut the three edges to create a flap. The hole left in the box is the window.
3. Line the inside of the flap with tinfoil, shiny side out, using tape or glue.
4. Open the box and tape down a double layer of plastic wrap on the inside of the window. Tape all around the edges to keep the heat trapped inside.
5. Glue or tape black paper on the bottom of the inside of the box. Black absorbs heat which will help the food cook.
6. Tape crumpled up newspaper or fabric around the inside edges of the box (make sure it still closes). This insulates the box.
7. Put the oven outside in the sun. Place the food on the pie plate in the oven and shut the lid.
8. Tilt the flap so the tinfoil is reflecting sun into the box. The heat will start to build up inside because it can't escape through the plastic wrap or the newspaper you used to insulate. Use a ruler or stick to hold it open.
9. Adjust the flap's angle as needed to keep the sun directed in the oven.
10. Leave the box until the food is cooked. Careful it might be hot! Use oven mitts to remove the food.
11. Check with an adult to make sure the food is ready to eat, then enjoy!

