

# Catching some rays

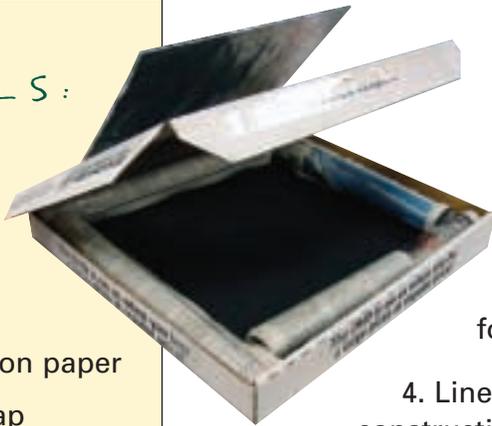
## Build a solar oven

By providing heat, the sun can help us save fuel. Solar ovens have been around since the 1830s, when astronomer John Herschel used one to cook food during an African expedition. You can make one out of a pizza box.



### SUPPLIES AND TOOLS:

- 1 pizza box
- newspapers
- scissors
- tape
- black construction paper
- clear plastic wrap
- aluminum foil
- ruler



### DIRECTIONS:

1. Draw an 8 1/2 inch x 11 inch square in the lid of the assembled box.
2. Cut out three sides of the square, and fold the flap back along the uncut edge.
3. Cover the inside of this flap with aluminum foil, using tape to hold the edges securely.
4. Line the inside bottom of the box with black construction paper. Use tape to hold the edges down.
5. Create insulation by rolling up some newspaper (about 1 1/2 inch thick) and fitting it around the inside edges of the box.
6. Tape one piece of plastic wrap (stretched tightly) to the underside of the lid opening, to cover. Tape another piece on the top of the lid opening, to create a layer of insulation that will help hold the heat in the box.
7. Prop the box at an angle facing the sun. Use a ruler to prop the flap open.

On a hot, sunny day the temperature can reach 200° F in your oven! Use it to make smores, or to warm some muffins.

Other options: Use different containers—like bowls or cans. Paint the cans different colors and see if it makes a difference.

Test the temperature (with a thermometer) inside the container with and without a plastic covering.

*Note:*

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