

MAKE A SOLAR WARMER

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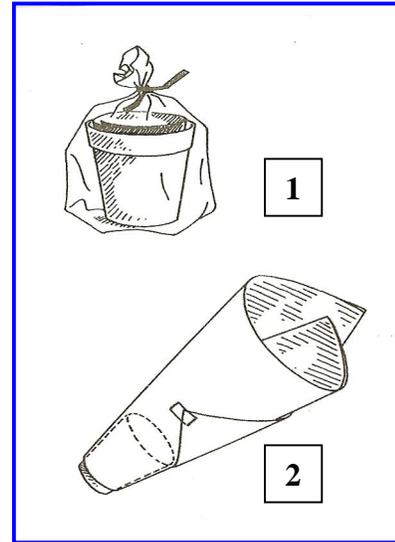
This activity will show you how to make a simple solar warmer. Solar is a word that has to do with the sun. Your solar warmer will use the energy of the sun to heat food. **This activity works best on a sunny summer day around noon when the sun is high in the sky.**

You Will Need

aluminum foil 12 inches x 18 inches (Handle the foil gently to avoid too many wrinkles.), poster board 12 inches x 18 inches, paper cup (not waxed), black paper, plastic sandwich bag, twist tie or string, slice of apple, piece of tape, glue

How to Make the Solar Warmer

1. Line the entire inside of the cup with black paper.
2. Place an apple slice in the bottom of the cup on a small piece of aluminum foil.
3. Seal the cup in a plastic bag. Use a twist tie or a piece of string. See picture 1.
4. Place glue on the poster board. Gently press the foil, shiny side up, to the poster board. Allow time for the glue to dry.
5. Lay the poster board flat on a table with the foil side up. Place the cup on its side at a slight angle in the upper left corner.
6. Pick up the upper left corner of the poster board. Roll the poster board and the cup backward on the foil. The poster board forms a cone as shown in picture 2. Tape the corner as shown.



Using your Solar Warmer

Take the solar warmer outside on a sunny summer day around noon. Aim it so that the sunlight reflects into the cup. You can hold it or prop it up. The cup will soon begin to feel warm. **Do not let it get too warm.** After a while, undo the tape and twist tie. Enjoy your warm apple slice.

How It Works

The aluminum foil reflects the sun's rays into the cup. The black paper in the cup absorbs the sun's heat. The plastic bag traps the heat much like a greenhouse.