

# Solar hog dog cooker

## Use the heat from the sun to cook

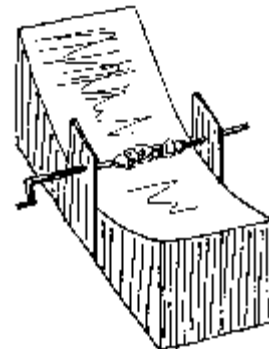
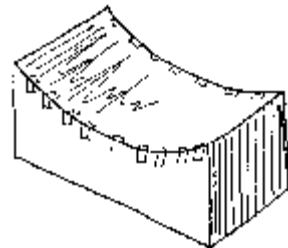
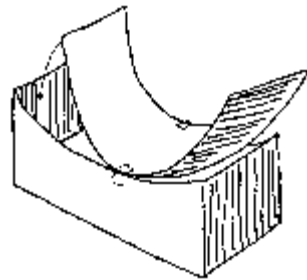
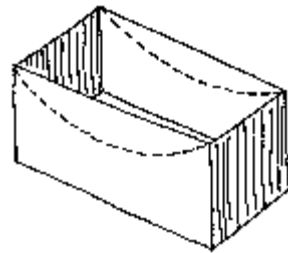
A reflective hot dog cooker can be built from a cardboard box, tin foil, and posterboard. Sunlight hits the reflective surface and focuses on the hot dog held in the centre. Scouts or Cubs can work in pairs or individually if there are enough materials.

### What do you need?

1. A cardboard box
2. tin foil
3. posterboard

### What to do?

1. Select a long narrow box; the longer the box the more heat collection is possible. Choose a focal length between 5" and 10" and design a parabolic curve as seen in the picture. One template could be used for all the cookers. Trace the curve on the open end of the box so that it is centred and straight.
2. Cut out the curve with a utility knife. Stress the importance of being exact. Measure and cut a piece of posterboard that will fit flush against the opening to the box. Attach this with tape beginning at the centre and working toward to edges.
3. Cover the curve with white glue and apply aluminium foil shiny side out. Start in the middle and smooth toward the edges. Try not to wrinkle or fold the foil; you want it as smooth as possible.
4. Use two scraps of cardboard taped to each side as supports. Using the sun or a projector light, test the focal point. There should be a bright spot where light is concentrated; mark this spot and punch a hole for the skewer. Use a section of a coat hanger from which the paint has been removed for a skewer.
5. Enjoy your hot dog!



Hunter & Coastal Region

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