

# Der Wiener Roaster

***User Guide***



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EDUCATION

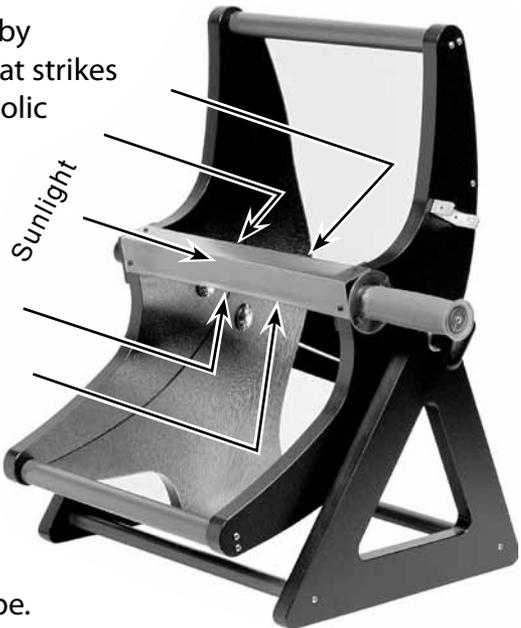
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## Preparation for Use

Wipe any dust or debris from the reflective surface with a small amount of glass cleaner and a soft cloth.

## How it Works

Der Wiener Roaster works by redirecting the sunlight that strikes a large surface area (parabolic reflective surface) onto a relatively small surface (cooking tube). The shiny, mirror-like surface reflects most of the light energy. Its curved shape directs the light toward the cooking tube. The cooking tube's dull black metal material absorbs most of the light energy, which raises the temperature inside the tube.



Obviously, bright, sunny days will work best with Der Wiener Roaster. Cooking times range from five to 30 minutes depending on the temperature and brightness of the sunlight.

## What to Cook

Der Wiener Roaster is designed to cook one or two standard-size hot dogs. Plump or jumbo-style hot dogs should not be used because they may swell and get stuck in the tube.

## Cooking with Der Wiener Roaster\*

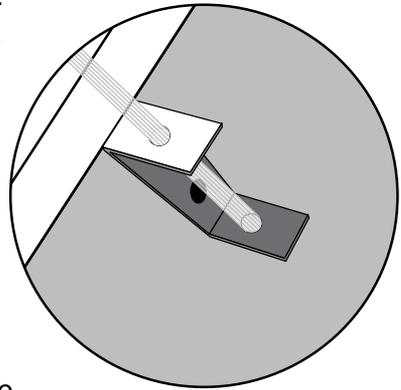
1. Wrap two standard-size hot dogs in aluminum foil. Do not use excessive foil as the hot dogs will be too bulky and will get lodged in the tube.

2. Place the two foil-wrapped hot dogs in the cooking tube. Place the cooking tube into the cooker by inserting it into the hole on the side of the heat collection unit.

**Caution:** Though there is a shield over the cooking tube, be very careful not to touch it. It is very hot and will burn.

3. Position the cooker so it is facing the Sun.

4. Notice the solar angle indicator on the side of the unit. The unit should be positioned and angled so the sunlight shines through the hole in the front of the indicator and is projected on the recessed circle on the rear surface of the indicator (see figure at right). This will ensure the cooker is positioned to optimize the heat energy from the Sun's rays.



Use the T-handle located on the side of the stand to secure the heat collection unit at the proper angle.

5. Periodically check the hot dogs to make sure they don't overcook. To do so, remove the cooking tube – being very careful not to touch its surface – and peer into the open end. When the hot dogs are done, they will be somewhat plumper than before and you will smell their aroma.
6. When the hot dogs are done, remove them from the tube by turning the tube upside down. You may need to gently tap the tube on a table surface if the hot dogs plumped a great deal during cooking. Unwrap the hot dogs, get some buns, ketchup, mustard, and relish – and enjoy!

\*Always use safe food preparation and handling practices.

## Activity Ideas

With some research or additional equipment, you can use Der Wiener Roaster for other activities. Below are some examples.

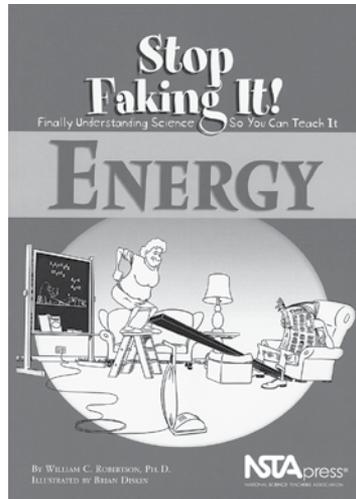
- Research the appropriate formulas and calculate the maximum BTUs that can be produced by Der Wiener Roaster.
- Using an infrared thermometer, measure and graph over time the temperature of the cooking tube.

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