

## Heat—Lesson Six

### Solar Ovens

**Standard VI: Heat, light, and sound are all forms of energy. Heat can be transferred by radiation, conduction, and convection. Visible light can be produced, reflected, refracted, and separated into light of various colors. Sound is created by vibration and cannot travel through a vacuum. Pitch is determined by the vibration rate of the sound source.**

**Objective 1: Investigate the movement of heat between objects by conduction, convection, and radiation.**

**Indicator e: Design and conduct an investigation on the movement of heat energy.**

Materials:

1. Solar Oven Activity (Taken from the State Science Teacher Resource Book, pages 13.2.5 and 13.2.6.)
2. Other materials needed are in the activity.

Directions:

1. Download the Solar Oven Activity.
2. Read the Background Information for yourself . You may want to share it with you students before starting the activity.
3. Do the Invitation to Learn wit the students.
4. Do the activity beginning with the Instructional Procedures.
- 5. You may want them to make their own solar oven by design.**
6. Have the students write about the whole activity in their journals.

Suggestions are:

- a. Drawing up their own designs and in their journals.
  - b. What materials they will use.
  - c. What the dimensions are.
  - d. Difficulty in building it.
  - e. What they needed to tweak.
  - f. What they are cooking.
  - g. The temperatures inside.
  - h. What the final product looked and tasted like.
  - i. What would they have done differently?
7. Have a discussion of what they learned about the experience.