# **Soda Can House Colors**

## WHAT EFFECT DOES THE COLOR OF A BUILDING HAVE ON ITS TEMPERATURE?

When we think about energy sources, we tend to forget about the sun, which is the ultimate source of our energy on earth. In many parts of the country, the sun shines on our houses many days a year.

Find out whether the color of a house has much effect on its temperature.

#### **TRY THIS**

- **1**. Give each team a soda can and tell the students this is their house.
- 2. Have each team choose a different color to paint their house. They can add outlines of windows and a door in another color.
- **3**. Set the cans to dry together in a dark closet.
- **4**. When they are dry, place all the can houses in the sunny window.
- **5**. After 30 minutes, insert the thermometer through the opening and record the internal temperature of each can house.



## THINGS YOU NEED

- Clean, open soda cansone per team
- Flat enamel paints in a range of colors, light to dark
- One paintbrush for each color of paint
- Dark closet
- Sunny window
- Thermometer you may want several

#### **POWER WORDS**

**Radiation** is the stream of invisible rays that come from any source of heat, including the sun.

**Solar Power** is energy from the sun.

### WHAT DO YOU THINK?

What if you live where summers are long and hot and air conditioning is expensive? What color should you paint your roof?

What about cold climates with long winters and big heating bills – what colors would help buildings there save energy?

Why do different colors get such different results?

