Optional Inquiry Lesson 2: Where Can Heat Come From?

Activity Instructions for Student eBook pgs. 179-180

Optional Inquiry Lesson 4: How Can We Keep Objects Warm or Cool?

Activity Instructions for Student eBook pgs. 193-194

1 Engage/Explore | 2 Explain | 3 Extend/Evaluate

How Can We Keep Objects Warm or Cool?

You have learned that sunlight has a warming effect on objects. Can you design and construct a device or structure that will increase or decrease the warming effect of sunlight?

Materials

- aluminum foil
- cardboard box
- colored paper
- scissors
- plastic wrap
- stopwatch
- tape
- 2 thermometers

1. Choose whether your device will increase or decrease the warming effect of sunlight.
2. Examine the materials. Design your device or structure. Include this constraint: your design must let you easily measure and record the temperature in your device.
3. Using the materials, construct your device.
   Caution! Be careful when using scissors.
4. Place one thermometer inside your device. Record the temperatures on both thermometers.

5. Put your device in a sunny spot. Lay the other thermometer next to the device. Record both temperatures every 5 minutes. Compare the numbers.