

# ELEMENTARY EXPLORATION: Solar Collectors

Solar collectors absorb radiant energy, convert it into heat and hold the heat.

**PURPOSE:** To explore solar collection.

**MATERIALS:** 4 plastic containers, black & white construction paper, water, thermometer, plastic wrap, rubber bands, scissors

Step 1: Cut two circles each of white and black construction paper to fit the bottom of the containers. Place the circles on the bottom of the containers and cover with 100 ml of cold water. Record the temperature of the water.

Step 2: Cover one black and one white container with clear plastic wrap held in place with rubber bands.

Step 3: Place the containers in a sunny place so that the sun is directly over the containers. Record the temperature of the water after ten minutes.

Step 4: Calculate and record the changes in temperature.

## RECORD THE DATA

	WHITE NO COVER	BLACK NO COVER	WHITE WITH COVER	BLACK WITH COVER
Original Temperature-C				
Temperature-C After 10 min				
Change in Temperature				

**CONCLUSIONS:** Look at your data. What have you learned about collecting solar radiation?

