

# Ice Melting Race

# Activity Mission 4

## Objectives

Observe the nature of light energy and heat energy  
Apply the concepts of absorption and reflection of light

## Initial Questions

Which color reflects all wavelengths of light and which color absorbs all wavelengths of light?

## Materials

- Ice cubes
- black and white construction paper (cut to 3" squares)
- pans or trays
- timer
- flashlight

## Procedure

1. Place two ice cubes on a tray.
2. Cover one ice cube with a piece of black (or dark-colored) construction paper. Cover the other ice cube with a piece of white (or light-colored) piece of construction paper.
3. Hold a flashlight over each piece of ice. Make sure that they are equidistant from the cubes. Watch to see the rate at which each ice cube melts.

## Questions

|             | Time to Melt | Observations |
|-------------|--------------|--------------|
| Black Paper |              |              |
| White Paper |              |              |

What did you observe? Write your answer in terms of heat and light.

What are 5 other light sources that give off significant heat?

What are some things that we use which are powered by light?