



Developed with Linda Roberts

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Feel the different effects of the sun on black and white paper

Objective

Students will...

- Develop an understanding of voluntary vs. involuntary reactions

Activity

1. Have each student apply a small roll of masking tape to the back of the black and white paper squares supplied.
2. Instruct students to stick the black square to one cheek on their face, and the white square on the other cheek.
3. Take students out in the sunlight for 5 to 10 minutes.

Discussion

Once back in the classroom, have the students describe what they felt. The black paper should heat up faster than the white paper because black absorbs sunlight and white reflects it.

Q: What are practical applications for this knowledge?

A: Wear light-colored clothing in the summer; passive solar collectors are black to absorb sunlight; the roof color of a building affects the temperature, etc.

Materials list

- 2" x 2" squares of white and black construction paper (1 of each per student) ([9715510\[AC\]](#) and [9715510\[AE\]](#))
- Masking tape ([9722464](#))
- Sunlight



Check out these other great products



Trippensee® Hand-Driven Illuminated Planetarium Model

Shows synchronized motions of Venus, Earth, moon, sun, and other planetary phenomena, including all the important Earth/moon/sun relationships. Light is used to illustrate lunar, solar, and annular eclipses; phases of the moon; and areas of day, night, and twilight.

SB15349



The Sunspotter™

Safely track sunspots as they appear, move, and vanish. By using a series of mirrors, a bright 3" solar image is projected onto a white viewing screen by a powerful 62 mm dia. objective lens. Eliminates the need for telescopes, solar filters, and tripods. Wooden, folded-Keplerian telescope provides a much safer and convenient way to view the brilliant light of the sun compared to more common methods.

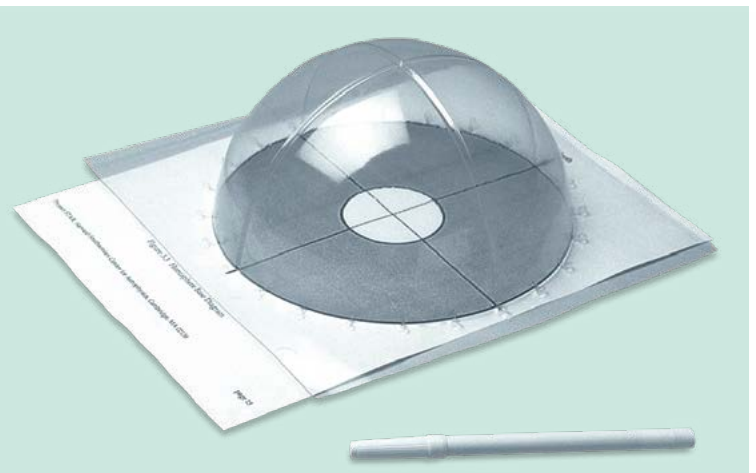
SB46150



Energy Beads

Uncover the hidden energy of ultraviolet light as beads change from white to a rainbow of colors when in the sun. 100 beads. ⚠ CHOKING HAZARD (1). Not for under 3 yrs.

SB47413



Sun Tracking Kit

Model demonstrates the true daily path of the sun. Repeating the same experiment, students will be able to compare the daily paths of the sun for different seasons of the year. 10 plastic hemispheres, a paper describing degrees upon which the hemisphere is placed, a marker, and instructions. ⚠ CHOKING HAZARD (1). Not for under 3 yrs.

SB50535

CHOKING HAZARD (1) ⚠ **WARNING: CHOKING HAZARD** – Small Parts. Not for children under 3 yrs.