

SOLAR CANS

PURPOSE: Children will observe the effects of light and heat on black and white surfaces.

MATERIALS:

Book Topic: radiation, absorption, light, color, heat

2 empty soup cans

White paper

Black paper

2 thermometers

Paper

Pencils



PROCEDURE

1. Wrap one soup can with white paper.
2. Wrap the other soup can with black paper.
3. Place a thermometer in each can.
4. Place the cans with the thermometers in them in a sunny place for about 1/2 hour.
5. Predict which can will have the highest temperature.

HOW IT WORKS:

The can with the black paper around it absorbs more light than the can with the white paper. White reflects light. Black absorbs light. Light produces heat. The more light that is absorbed, the more heat it generates. Therefore, the thermometer in the black can will reach a higher temperature than the thermometer in the white can.



WRITING PROMPT

You learned that black absorbs more light than white.

Think about the experiment you just did.

Now write a paper explaining a new type of clothing people should wear in very hot climates.

Parent Signature: _____

**FAMILY SCIENCE PROJECT**

Date: _____

Name: _____

Teacher: _____

Hypothesis (What do you think will happen?)

Date/Observation:

Conclusion: (What you learned or discovered):

*(*You may continue your observation on another sheet. You may want to create a graph to record your data.)*

For the reading portion of Family Science, you may choose to read a book or an article, OR you may use the Internet in order to find some background information concerning this Family Science Project. If you read a book or an article, please include the complete title and author. If instead you looked up the information on the Internet, please include the complete website.

We read the following book, **OR** researched the information on the Internet:

Book Title: _____ Author: _____

Internet-Complete Website _____

Writing Prompt (minimum 5 sentences)
