Hot and Cool

Supplies:
• 2 identical drinking glasses
• Water
• Thermometer
• 2 rubber bands
• Strip of white paper
• Strip of black paper

Directions:

1. Wrap the white paper around one of the glasses using a rubber band to hold it on.
2. Do the same with the black paper and the other glass.
3. Fill the glasses with the exact same amount of water.
4. Leave the glasses out in the sun for a couple of hours before returning to measure the temperature.

Results:

Water temperature of glass with white paper: __________

Water temperature of glass with black paper: __________

Explanation:

Dark surfaces, such as the black paper, absorb more light and heat than the lighter ones, such as the white paper. After measuring the temperatures of the water, the glass with the black paper around it should be hotter than the other. Lighter surfaces reflect more light.

Questions:

Would someone wearing a black shirt be as hot as a person wearing a white shirt?

Would other items that are dark also get hotter quicker than light colored items?

The slide at the park is dark blue and the temperature is 100 degrees. What are some things that you can do to make sure your skin is protected from the hot slide?

Would a dark car with dark interior get hotter in the summer than one with light fabric?