



What Absorbs More Heat?

When you're out in the sun on a hot summers day it pays to wear some light coloured clothes, but why is that? Experiment with light, colour, heat and some water to find out.

What you'll need:

- 2 identical drinking glasses or jars
- Water
- Thermometer
- 2 elastic bands or some sellotape
- White paper
- Black paper

Instructions:

1. Wrap the white paper around one of the glasses using an elastic band or sellotape 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 of the water in each.

What's happening?

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, that's why people where lighter coloured clothes in the summer, it keeps them cooler.

There is an opportunity to play a game using mirrors to bend light by clicking on the following link.

<https://www.sciencekids.co.nz/gamesactivities/howweseesee.html>