

# ***WHICH IS HOTTER?***

If you put different colored shirts in the sun for around 45 minutes on the same day, then which shirt would be the hottest?

## ***Abstract***

A lighter colored shirt would be cooler than a darker colored shirt on a regular day.

## ***Background Research***

I had heard that a white surface would reflect light while a black surface would absorb the light. So, I used this as the basis for my experiment and assumed that a black shirt would be hotter on a regular day, as black shirt absorb light.

## ***Procedures***

Keep 4-5 shirts on a table outside. Check every 5 minutes to see if a shadow has fell on the clothes, it should not. Every 15 minutes check the temperature. Do this for 1 hour. Remember to record the temperature to see which shirt would be the hottest at the end of 1 hour.

## ***Experiment***

First, I put the 5 colored shirts (Red, Black, Green, Yellow, White) on a badminton net so that it could warm up. After that, I checked the temperature of the shirts every 15 minutes. I did this for an hour. At the end I checked the temperatures of the shirts and saw that the black shirt was the hottest and the white shirt was the coolest.

## ***Conclusions***

The black shirt did turn out to be the hottest and the white shirt turned out to be the coolest.

## ***References***

[Link #1](#)

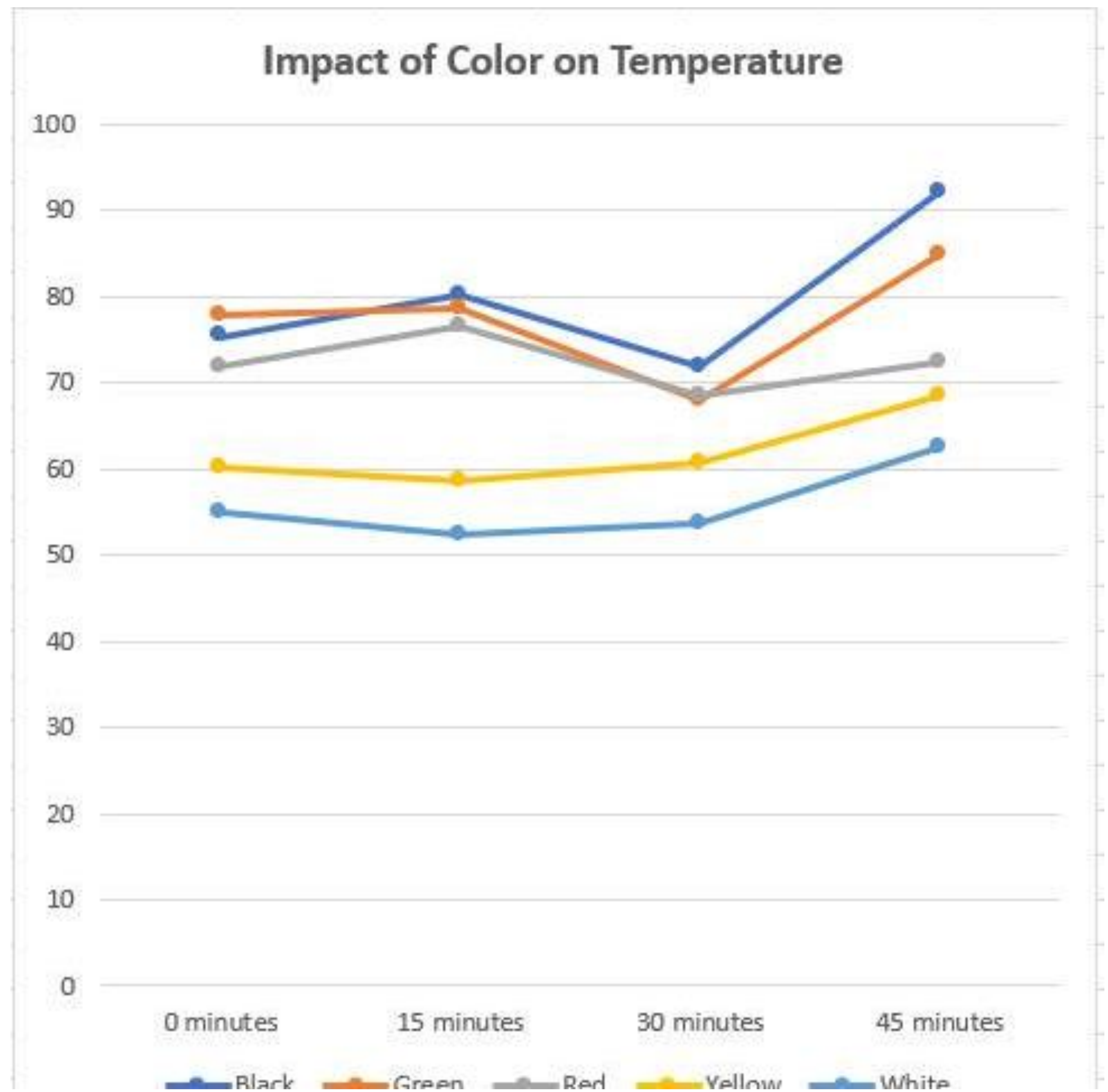
[Link #2](#)

## ***Acknowledgements***

I would like to thank my brother for helping me do my experiment.



# Data Graph





## Data Table

	<u>Starting Temp</u> <u>-arture</u>	<u>Temperature</u> <u>after 15</u> <u>minutes</u>	<u>Temparture af</u> <u>-ter 30</u> <u>minutes</u>	<u>Temparture af</u> <u>-ter 45</u> <u>minutes</u>
<u>Black Shirt</u>	75.4°F	80.1°F	72.0°F	92.1°F
<u>Green Shirt</u>	77.9°F	78.6°F <small>Click to add text</small>	68.0°F	84.8°F
<u>Red Shirt</u>	72.0°F	76.5°F	68.5°F	75.4°F
<u>Yellow Shirt</u>	60.3°F	58.6°F	60.6°F	68.5°F
<u>White Shirt</u>	54.9°F	52.3°F	53.6°F	62.6°F