



Colors and Light

Grade Levels: 1-4

Background

Light energy can turn into heat when it hits an object. Light can also be reflected from an object so it doesn't turn into heat.

Question

Do some colors absorb more sunlight than others?

Possible Hypotheses

All colors absorb the same amount of sunlight.

Some colors absorb more sunlight than others.

Materials

- Four tall clear glasses
- Water
- Food coloring
- Immersion thermometer

Procedure

1. Fill the glasses with the same amount of cold water. Record the temperature of the water.
2. Add 20 drops of red food coloring to one glass, 20 drops of yellow to one glass, and 20 drops of blue to one glass. One glass will have no food coloring.
3. Place all four glasses in a sunny place for 15 minutes.
4. Record the temperature of the water in all four glasses.

Analysis and Conclusion

Did the temperature of the water change? Which water got warmest? What did you learn about colors and light?

