

Dinner and Data and Drones, Oh My!

Light

Why are things the colors that they appear?

Visible light is part of the electromagnetic spectrum. White light is the combination of the visible wavelengths of light and can be divided into its different wavelengths by using a prism. The colors of visible light include red, orange, yellow, green, blue, indigo and violet. Beyond violet there are longer wavelengths that are not visible.

Plants, animals, and all objects are the color they appear not because of light that they emit, but the color of the light that is reflected from the surface of the item. A green plant reflects green light and absorbs all other colors of white light. A red shirt is red because it reflects red light and absorbs the other colors.

Materials:

colored sheets of acetate
white paper
construction paper

Procedure:

1. Choose a colored piece of acetate
2. Look at the white paper through the colored acetate. Record what color you see.
3. Look at a yellow piece of construction paper through the colored acetate. Record the color you see.
4. Try this with various colors of construction paper and various pieces of colored acetate. Do you see any patterns of the colors of light absorbed or reflected?

Color acetate	Color paper	Color you see
Blue		
Blue		
Yellow		
Yellow		
Red		
Red		

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