Light & Color

Tinted Tops!

Target Grade Level(s): 3rd-6th grade

There are seven colors in the visible light spectrum: red, orange, yellow, green, blue, indigo, and violet (ROY G BIV). When all seven colors of light combine they produce white light. The colors of objects appear the way they do because of how they interact with light. When an object appears red, it absorbs every color of visible light EXCEPT red, which it reflects. Thus, how light is absorbed and reflected in relation to these objects is what determines their color.

Supplies

- One (1) paper plate or piece of cardstock paper
- Two (2) rubber bands
- One (1) pencil
- One (1) pair of scissors
- One (1) set of crayons (ROYGBIV)

Challenge

How-to:

1. Draw a circle with a 4-in diameter on the plate
2. Use the pencil to mark the center of the circle
3. Cut the circle out from the paper plate
4. Mark seven evenly spaced sections on your circle
5. Color each section of the circle using the crayons, each section being a different color
6. Using your pencil, poke a hole through the middle of the circle
7. Secure the pencil in the middle of the circle using the rubber bands
8. Spin the top

Guiding questions:

1. What are the colors of the rainbow?
2. What colors do you think are in white light?
3. What happened to your top when you spun it?
4. How did the colors change?