Bubbly Color Spectrum

Learn about the color spectrum through bubbles.

Age Appropriateness:

2-5, 5-8, 9-12

Key Topics:

Reuse,

Light Spectrum

Skills:

Group Cooperation,

Following instructions,

Science

Materials:

Water, Dish detergent, Glycerin, Basin/Bowl, Crayons

Action Time:

1 hour

Resources:

http://www.cs.dartmouth.edu/farid/sciencekids/rainbow.html

Ballard, Carol. *Hoe Do Our Eyes See?* Austin, TX: Raintree Steck-Vaughn, 1998.

OBJECTIVES

- Use bubbles to learn how light wavelengths travel and create colors.
- Explore great ways to reuse ordinary items for other, fun purposes.

Preparation

Start by discussing some basic fundamentals of color and the visible light spectrum. An explanation of the rainbow is a great way to introduce this topic to kids. Allow kids some time to draw a rainbow or color spectrum from memory to see if they can correctly order the color spectrum.

Introduce the mnemonic device ROY G. BIV (red, orange, yellow, green, blue, indigo, violet) as a kid-friendly approach to discuss the color spectrum.

Action

- In a large basin, combine 2/3 cup dishwashing soap, one gallon of water and 2-3 tablespoons of glycerin. Allow the bubble solution to sit for a few hours (sitting overnight is ideal for the best bubbles).
- Any handy reusable item can be used to facilitate the bubbles including hangers fashioned into circles, six-pack soda rings, or cookie cutters – if nothing is available kids can simply use their hands fixed like the “Okay” sign!
- Allow kids to color the spectrum they see in the bubbles.

Reflection

1. Allow kids to compare their original drawings to those created after the bubble activity.
2. Include discussion that forces kids to think about what’s creating a rainbow – what’s acting as a prism?
3. Allow for some abstract conversation– what would the world be like without color?