



4-H VOLUNTEER INFORMATION SERIES

Nebraska 4-H Youth Development

Club Activity Idea: Edible Color Wheel

Specific Project(s): Visual Arts 1; Visual Arts 2; Home Building Blocks, STEAM Clothing

Description of Activity:

This is a creative and tasty way to introduce or reinforce participants' understanding of mixing colors and color theory.

Age Level: 8 – 12

Group Size: Any

Time Involved: Preparation time: 15 minutes Activity time: 20 minutes

Materials Needed:

- Frosting: make your own or purchase it
- Plain cookies: vanilla wafers work well
- Red, blue, and yellow food coloring
- Paper plates
- Plastic knives/craft sticks/spoons
- Paper towels or napkins

Introduction

We live in a colorful world. This activity will help you explore colors as they are arranged in the color wheel. Understanding the difference between warm hues and cool hues will help us make decisions when choosing colors for everything!

The color wheel arranges colors in a way that shows us how colors flow from one hue to the next. The color wheel we will work with in this activity breaks the color wheel down into three categories; primary colors, secondary colors and tertiary colors. Primary colors are naturally occurring and when mixed create the rest of the colors on the color wheel.

Virtual delivery note:

When you are leading the activity, consider pausing between each step and evaluating if all participants are ready to move forward, if they need assistance, etc. To do this, you could use some built-in features of zoom, such as turning off their camera until they are ready, using the thumbs-up reaction when they are ready to continue. There are many ways to engage virtually with youth, you are encouraged to be creative!



Activity:

1. Mix amount needed of each: red, blue and yellow frosting.
2. Give a small amount of each of the three colors of frosting on a paper plate to each participant.
3. Give each participant 6 cookies. Place cookies in a circle on a paper towel or plate.
4. Instruct each participant to frost one cookie red, one cookie blue, and one yellow. Talk about:
5. Explain that primary colors are mixed to create additional hues that make-up secondary and tertiary colors. They are called primary because they are the base of all other colors.
6. Place the cookies on the paper towel so they are in a circle with an unfrosted cookie between each frosted cookie.
7. Explain next that the youth will be creating secondary colors by mixing two primary colors.
 - a. Using a small amount of both red and blue frosting, they will make violet. When they have created violet, frost the empty cookie between the red and blues ones.
 - b. Next, use a small amount of both blue and yellow frosting to make green. When they have created green, frost the empty cookie between the blue and yellow ones.
 - c. Finally, use a small amount of yellow and red frosting to make orange. When they have created orange, frost the empty cookie between the yellow and red ones.

Optional: You can use to create a larger and more in-depth color wheel by creating tertiary colors. When you mix a primary color with a secondary color a tertiary color is the result. In naming tertiary colors, the primary is always listed first. Yellow and orange make yellow-orange. Red and orange make red-orange. Red and violet make red-violet. Blue and violet make blue-violet. Blue and green make blue-green. Yellow and green make yellow-green.

8. Youth can eat their edible color wheel now, if they choose. While the youth are eating their edible color wheel, explain how warm hues like red, orange and yellow are bright and energetic while cool hues like green, blue and violet appear calm and relaxing. Color can play an important part of the design process because color can change the way we feel.

Discussion Questions:

1. What are the three primary colors?
2. How does color influence us?
3. How will we use the color theory in our lives?
4. Why do you think it might be important to understand how color makes us feel?
i.e. hospital gowns are typically clam colors; a clown outfit typically has bright and energetic colors; choosing colors for a sports team or business

Virtual Delivery Email:

Send the following email to all participants 4-7 days prior to the scheduled 4-H experience:

Hello! On <insert the date and time of the 4-H experience>, we will be creating an edible color wheel during our time together to learn about the color wheel and how colors are made! Please get the following materials prior to our session: Frosting: make your own or purchase it; Plain cookies: vanilla wafers work well; Red, blue, and yellow food coloring; Paper plates; Plastic knives/craft sticks/spoons; Paper towels or napkins. Please also be prepared to have a good amount of space to do the activity during our virtual 4-H experience. Please let me know if you have any questions!

Lesson Developed by: Tanya Crawford, University of Nebraska-Lincoln Extension
Source: Adapted from Unit 1 of STEAM Clothing Curriculum