

QUICK & EASY COLOR WHEEL DYEING WITH SILK

FIDM's Just for Educators Classroom Projects & Activities



Objective:

To help students understand the basics of Color Theory as it relates to dyes and textiles

Suggested for: *Art, Clothing*

Student Activities:

Students listen to a discussion of basic Color Theory, explaining primary, secondary, and tertiary colors. They review the cultural meanings of color...i.e. red, black, green, etc. The discussion continues with how secondary and tertiary colors are made. Students start with a recipe for red, yellow, and blue dyes. They then proceed to mix the three secondary and six tertiary colors.

Students are given 12 swatches of white silk. They dye each one with a different color using the primary, secondary, and tertiary colors. After drying the swatches, students assemble a color wheel using their dyed fabrics.

Arizona State Standards:

• Visual Arts: Strand 1: Create

Concept 2 The student will use materials, tools, and techniques in his or her own artwork.

Concept 3 The student will use elements of art and principles of design in his or her own artwork.

California State Standards:

• Media and Design Arts Pathway

A1.1 Analyze and discuss complex ideas, such as distortion, color theory, arbitrary color, scale, expressive content, and real versus virtual in works of art.

• Fashion and Interior Design Industry Sector

A4.0 Students understand and apply the elements and principles of design in various aspects of the fashion industry.

A4.4 Students understand the fundamentals of color theory and color forecasting.

Washington State Standards:

• Essential Academic Learning Requirements: The Arts

1 The student understands and applies art knowledge and skills.

National Standards:

• Family and Consumer Sciences

16.0 Textiles, Fashion, and Apparel

16.3.2 Apply basic and complex color schemes and color theory to develop and enhance visual effects.

NA-VA.9-12.6 Making Connections between Visual Arts and Other Disciplines

Students compare the materials, technologies, media, and processes of the visual arts with those of other arts disciplines as they are used in creation and types of analysis.

Materials Needed:

- Jacquard acid dyes in red, yellow, and blue
- Vinegar
- Various bowls, measuring cups, and spoons not used for food preparation
- Plastic wrap
- Disposable gloves
- Face mask to be worn during mixing
- White silk
(available through Dharmatradingco.com)
- Eyedroppers
- Small plastic cups (12 per student)
- Hot water
- Ziploc sandwich bags (12 per student)
- Scissors
- Paper
- Double-sided tape

Begin this exercise with a discussion of basic color theory: primary, secondary, and tertiary colors. Ask your students the cultural meanings of colors. What does red mean universally? Green? Black?

Continue with a discussion of how secondary and tertiary colors are made. Although a secondary color is visually midway between two primaries, it is not physically made of equal amounts.

Project Guidelines:

1. Prepare the dyes:
 - Acid Dye Recipe
 - Mix 4 teaspoons of red dye in cup of hot water
 - Add to 2 quarts of hot water
 - Add cup vinegar
 - Mix together
2. Repeat the process for yellow and blue dyes.
3. Cut the white silk fabric into 2"x 2" swatches.
4. Give each student:
 - 12 swatches
 - 1 plastic cup of each of the three primary color dyes already prepared
 - 9 empty cups to make the remaining colors of the color wheel
5. Have students mix the secondary and tertiary colors, moving from light to dark and adding colors with eyedroppers.
6. Have students wet swatches thoroughly with water.
7. Instruct students to place each swatch in a cup with enough dye to completely cover the fabric and allow the swatch to float.
8. Leave swatches in the cup of dye for about 15-20 minutes until the color is thoroughly absorbed.
9. Place each dyed swatch in a separate plastic bag for up to 2 hours.
10. Remove swatches and rinse thoroughly in warm water.
11. Trim swatches neatly and uniformly.
12. Affix double-sided tape along the top edge of each swatch.
13. Mount each swatch on paper in a circle with all 12 colors touching.