## Arts Foundations Visual Arts Lesson

### Color Mixing and Relationships
Author: Beverly Harding Buehler

### Enduring Understanding
Mixing primary colors creates secondary and tertiary colors. Placing warm colors next to cool colors can create contrast and draw attention.

### Lesson Description
(Use for family communication and displaying student art)

Students study color mixing through creating a 6-section color wheel composed of primary and secondary colors (Grades 3-5 color wheels are 12 sections and include tertiary colors). Next, warm and cool colors relationships in art are analyzed using critical thinking skills. Students then create a nonrepresentational watercolor painting that combines warm and cool color for emphasis or contrast.

### Learning Targets and Assessment Criteria

<table>
<thead>
<tr>
<th>Target</th>
<th>Criteria</th>
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<tbody>
<tr>
<td><strong>Target:</strong> Fills a color wheel, ordering the colors: red-orange-yellow-green-blue-violet.  &lt;br&gt; <strong>Criteria:</strong> Labels and paints primary colors (red-yellow-blue) then labels, mixes and paints secondary colors (orange-green-violet) in designated sections on color wheel template. Grade 3-5 also labels, mixes, and paints tertiary/intermediate colors (red-violet, blue-violet, red-orange, yellow-orange, yellow-green, blue-green) in designated sections on color wheel template.</td>
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<td><strong>Target:</strong> Thinks critically.  &lt;br&gt; <strong>Criteria:</strong> Asks clarifying questions, uses evidence to question or explain creative choices, constructs meaning.</td>
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### Vocabulary

<table>
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<tr>
<th>Arts:  &lt;br&gt; Cool Colors  &lt;br&gt; Contrast  &lt;br&gt; Emphasis/Dominance  &lt;br&gt; Non-representational Art  &lt;br&gt; Primary Colors  &lt;br&gt; Secondary Colors  &lt;br&gt; Tertiary Colors  &lt;br&gt; Warm Colors</th>
<th>Museum Artworks or Performance</th>
</tr>
</thead>
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<tr>
<td><strong>Seattle, WA</strong>  &lt;br&gt; Seattle Art Museum</td>
<td><strong>Tacoma, WA</strong>  &lt;br&gt; Children’s Museum of Tacoma  &lt;br&gt; Tacoma Art Museum</td>
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### Materials

| **Materials**  <br> Drawing pencil: 2H; Watercolor paint, liquid: yellow, blue, and red; Watercolor brushes: small and medium round and flat; Small flat/wash brushes for watercolor; Water containers; Paper towels; White cardstock, 8.5x11”, copy color wheel templates from lesson, one of each color wheel per student; Watercolor paper: 6x9” and 9x12”; one of each size per student; Color wheel poster; Color wheels, individual; Class Assessment Worksheet; Arts Impact sketchbook | **Learning Standards**  <br> **WA Arts Learning Standards in Visual Arts**  <br> For the full description of each standard, see: [http://www.k12.wa.us/Arts/Standards](http://www.k12.wa.us/Arts/Standards)  <br> **Creating (Concepts: Shape, Color – Primary, Secondary, Tertiary, Warm, Cool. Technique: Watercolor Painting)**  <br> 1. Generate and conceptualize artistic ideas & work.  <br> 2. Organize and develop artistic ideas and work.  <br> 3. Refine and complete artistic work.  <br> **Performing/Presenting/Producing**  <br> 4. Select, analyze, and interpret artistic work for presentation.  <br> 5. Develop and refine artistic techniques and work for presentation.  <br> **Responding**  <br> 7. Perceive and analyze artistic work.  <br> 8. Interpret intent and meaning in artistic work.  <br> 9. Apply criteria to evaluate artistic work.  <br> **Connecting**  <br> 11. Relate artistic ideas and works with societal, cultural, and historical context to deepen understanding. | continued |
| continued | continued |
Seattle Art Museum images:
The Studio, 1977, Jacob Lawrence, 90.27

Yeihl Nax’in, c. 1830, Native American, Tlingit, 79.98

How My Mother’s Embroidered Apron Unfolds in My Life, 1944, Arshile Gorky, 74.40

Tacoma Art Museum
Body Fires A, 1991, Fay Jones

Early Learning Guidelines (Pre-K – Grade 3)
(Age 4 to 5) 6. Learning about my world: Knowledge: name more than three colors. Math: match and sort simple shapes. Arts: express self through art and music.

Common Core State Standards (CCSS) in ELA
For a full description of CCSS Standards by grade level see: http://www.k12.wa.us/CoreStandards/ELAstandards/SL.CCR.2. Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
**ICON KEY:**

- Indicates note or reminder for teacher
- Embedded assessment points in the lesson

**Pre-Teach**
Build color awareness through helping students to observe and analyze color seen in book illustrations, interior spaces, fabrics, and the natural world.

**Lesson Steps Outline**

### Day One

1. Show a color wheel and explain relative placement of colors on the wheel. Explain primary colors are those that cannot be mixed, and that they are equidistant from each other on the color wheel. Guide students in marking R, Y, B in appropriate places on pre-drawn color wheel templates.

   ✔ Criteria-based teacher checklist: Labels and paints primary colors (red-yellow-blue) on color wheel template.

2. Demonstrate how secondary colors are achieved when two primary colors of paint are mixed together. Guide students in labeling secondary colors in their appropriate sections on the color wheel, mixing colors, and filling those places in with paint.

   ✔ Criteria-based teacher checklist: Labels, mixes and paints secondary colors (orange-green-violet) in designated sections on the color wheel.

Grades 3-5 also complete the following step:

3. Demonstrate how tertiary colors are achieved when primary colors of paint are mixed with adjacent secondary colors. Guide students in labeling tertiary colors in their appropriate sections on the color wheel, mixing colors, and filling those places in with paint.

   ✔ Criteria-based teacher checklist/room scan: Grade 3-5: Labels, mixes, and paints tertiary colors (red-violet, blue-violet, red-orange, yellow-orange, yellow-green, blue-green) in designated sections on color wheel template.
Day Two

1. Show color wheel divided in half to describe warm colors on one side and cool colors on the other. Play new version of “Red Light, Green Light” to identify warm and cool colors in the room.

☐ Criteria-based process assessment: Identifies warm and cool colors in the environment.

2. Introduce and guide critical thinking process. Analyze The Studio by Jacob Lawrence and Yeihl Nax’ín, Native American, Tlingit, from Seattle Art Museum collection, and Body Fires by Fay Jones from Tacoma Art Museum collection. Look for the ways warm and cool colors draw attention to each other.

☐ Criteria-based student self-assessment: Uses evidence to question or explain creative choices.


☐ Criteria-based student self-assessment: Asks clarifying questions, uses evidence to question or explain creative choices, constructs meaning.

4. Facilitate students making nonrepresentational paintings, juxtaposing warm and cool colors.

☐ Criteria-based teacher checklist: Creates shapes not related to representational subjects. Paints selected shapes with warm color for emphasis and paints rest of composition with cool color(s).

5. Lead students through a critical thinking critique process.

☐ Criteria-based teacher checklist and peer reflection: Asks clarifying questions, uses evidence to question or explain creative choices, constructs meaning.
LESSON STEPS

Day One

1. Show a color wheel and explain relative placement of colors on the wheel. Explain primary colors are those that cannot be mixed, and that they are equidistant from each other on the color wheel. Guide students in marking R, Y, B in appropriate places on pre-drawn color wheel templates.
   Grades K-2 use 6-section color wheel template; Grades 3-5 use 12-section color wheel template.

   - Primary means first or original. Primary colors are those that cannot be mixed from other colors; they are the original three colors from which all other colors are made.
   - On a color wheel, primary colors are placed equal distance from each other (on a six-piece pie color wheel there is one section between each primary color).
   - On a 12-piece pie color wheel there are three sections between each primary color. Mark your empty color wheel with the letters, Y, R, and B for yellow, red, blue — equal spaces apart.
   - Label and paint each of the primary colors on your color wheel template.

Criteria-based teacher checklist: Labels and paints primary colors (red-yellow-blue) on color wheel template.

2. Demonstrate how secondary colors are achieved when two primary colors of paint are mixed together. Guide students in labeling secondary colors in their appropriate sections on the color wheel, mixing colors, and filling those places in with paint.
   Ways to demonstrate could include: mixing colors on paper in front of class, mixing small containers of paint or dye, or overlaying colored acetate shapes and projecting with document camera.

   - If primary means first, what does secondary mean? Secondary colors are those that are made from mixing two primary colors. What color do you get when you mix yellow and red? Red and blue? Yellow and blue?
   - On the color wheel, each secondary color is placed right in the middle between the two primary colors from which it is made. So which two primary colors are positioned on either side of orange? (red and yellow) Green? (blue and yellow) Violet? (red and blue).
   - Label the color wheel sections for secondary colors. Mix secondary colors, working to mix your colors so they are similar to the secondary colors on the individual color wheel at your table.
   - Fill in the section for each of the secondary colors on your color wheel.

Criteria-based teacher checklist: Labels, mixes and paints secondary colors (orange-green-violet) in designated sections on the color wheel.
Grades 3-5 also complete the following step:
3. Demonstrate how tertiary colors are achieved when primary colors of paint are mixed with adjacent secondary colors. Guide students in labeling tertiary colors in their appropriate sections on the color wheel, mixing colors, and filling those places in with paint.

This step requires the 12-section color wheel suitable for Grades 3-5.

- Tertiary means third, and tertiary colors (also called intermediate colors) are made from mixing primary and secondary colors together.

- A tertiary color is placed on the color wheel between the two colors used to mix it, for example blue-violet is placed between blue (primary) and violet (secondary). We use the word violet instead of purple because when we mix intermediate colors, using the vocabulary word for the secondary color violet leads us to name the tertiary colors: blue-violet and red-violet.

- Now label the color wheel sections for tertiary colors. Work to mix similar (approximate) colors since the print colors on the color wheel and the pigmented colors of paint can be different.

- Be sure to paint your tertiary colors in the corresponding sections of the color wheel.

Criteria-based teacher checklist/room scan: Grade 3-5: Labels, mixes, and paints tertiary colors (red-violet, blue-violet, red-orange, yellow-orange, yellow-green, blue-green) in designated sections on color wheel template.
LESSON STEPS

Day Two

1. Show color wheel divided in half to describe warm colors on one side and cool colors on the other. Play new version of “Red Light, Green Light” to identify warm and cool colors in the room.

- There are many ways to describe color. One way is to describe its “temperature.” Gesturing to warm colors: Where do you find these colors in nature? (sun, fire, desert) These colors are called warm colors. Gesturing to cool colors: What cool things in nature have these colors? (water, ice, shady trees).

- To improve our skills at identifying warm and cool colors, let’s play a new version of “Red Light, Green Light.”

Revised “Red Light, Green Light” game: Instead of leader calling out the expected prompts, the leader calls out “warm color” or “cool color.” When the leader calls out a “warm color” the students find and touch something with a warm color in the room. Vice versa for “cool color.” The last person to find something the appropriate color to touch is “it” the next round.

Criteria-based process assessment: Identifies warm and cool colors in the environment.

2. Introduce and guide critical thinking process. Analyze The Studio by Jacob Lawrence and Yeihl Nax’în, Native American, Tlingit, from Seattle Art Museum collection, and Body Fires by Fay Jones from Tacoma Art Museum collection. Look for the ways warm and cool colors draw attention to each other.

The Seattle Art Museum’s collection is available on-line at: http://www1.seattleartmuseum.org/eMuseum/code/emuseum.asp. To find the images in this lesson, enter the accession number for the work of art in the search box on the collections page of SAM’s website. Accession numbers for these works of art are listed in the materials box at the beginning of the lesson.
The Tacoma Art Museum’s collection is available on-line at:
http://www.tacomaartmuseum.org/explore/collections

- Talk with a peer about the paintings. Choose one to talk about.
- Answer the following questions: Document your thinking on the self-assessment worksheet.
  - Where does your eye go first in this painting?
  - Why do you think it goes there first?
  - Which colors seem to jump up at you?
  - Which seem to move back?

Teacher can further support critical thinking with explanation below if needed.

- Warm colors often seem to advance or come forward in a painting, and cool colors often seem to recede. Can you find places in these paintings where this is true for you?
- When you place a warm and a cool color right next to each other, they draw attention to each other and create an area of emphasis or dominance in the painting.
- Can you find a place in one of these paintings that draws your attention — where the artist has placed warm and cool colors right next to each other?
Remember that all people see color differently, so there may be different answers from different classmates.

Criteria-based student self-assessment: Uses evidence to question or explain creative choices.

### 3. Define nonrepresentational art.

- Can you find anything in this painting you recognize? Art in which the artist uses colors and fantastic shapes that do NOT refer to anything in life is called nonrepresentational.

- If “represent” means to suggest something from life, what do you think nonrepresentational means?

- Talk with a peer about this painting: Document your thinking on the self-assessment worksheet.
  
  - Choose five words to describe this painting.
  
  - What questions come to mind when you look at this painting?
  
  - What do you think this painting is communicating or about?

Criteria-based student self-assessment: Asks clarifying questions, uses evidence to question or explain creative choices, constructs meaning.
4. Facilitate students making nonrepresentational paintings, juxtaposing warm and cool colors.

- We are going to make nonrepresentational paintings in which we will choose to emphasize certain shapes by painting them with warm colors, and then surround them with cool colors.

- First lightly sketch fantastic shapes and then paint those shapes with warm colors. Then choose a cool color(s) to paint the background to create emphasis in your painting.

☑ Criteria-based teacher checklist: Creates shapes not related to representational subjects. Paints selected shapes with warm color for emphasis and paints rest of composition with cool color(s).

5. Lead students through a critical thinking critique process.

- How did you create emphasis in one of your non-representational shapes?
- How did you select a cool color for the space around it?
- How did you refine your painting before completing it?
- Respectfully ask peers about their artistic choices.
- Ask other clarifying questions.

☑ Criteria-based teacher checklist and peer reflection: Asks clarifying questions, uses evidence to question or explain creative choices, constructs meaning.
Primary and Secondary Color Wheel Template
Primary, Secondary, and Tertiary Color Wheel Template
Teachers may choose to use or adapt the following self-assessment tool.

### STUDENT SELF-ASSESSMENT WORKSHEET

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Color Wheel</th>
<th>Critical Thinking</th>
<th>Composition</th>
<th>Emphasis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept</td>
<td>Criteria</td>
<td>Student Name</td>
<td></td>
<td></td>
<td>5/6</td>
</tr>
<tr>
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### Critical Thinking:

#### Analyzing Color Relationships
- Talk with a peer about the paintings. Choose one to talk about.

- Answer the following questions. Take notes.
  - Where does your eye go first in this painting?
  - Why do you think it goes there first?
  - Which colors seem to jump up at you?
  - Which seem to move back?

#### Analyzing Nonrepresentational Art
- Talk with a peer about this painting. Take notes.
  - Choose five words to describe this painting.
  - What questions come to mind when you look at this painting?
  - What do you think this painting is communicating or about?
# Class Assessment Worksheet

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Total 

**Percentage**

What was effective in the lesson? Why?

What do I want to consider for the next time I teach this lesson?

How could I connect the concepts in this lesson with other disciplines?

Teacher: __________________________ Date: ____________
Dear Family:

Today your child participated in an Arts lesson. We learned about color mixing by creating a color wheel. Then we painted a nonrepresentational composition. Nonrepresentational means the painting doesn’t refer to any subject in life, so the shapes and colors come from our imaginations.

- We made a color wheel, and painted the sections with three primary colors (red, blue, yellow) and three secondary colors (orange, green, violet). Tertiary colors are intermediate colors that can be created by mixing a primary and a secondary color together: red-orange and yellow-orange, yellow-green and blue-green, and red-violet and blue-violet.

- We talked about how the color wheel shows us the warm colors grouped together on one side and the cool colors grouped together on the opposite side. Warm colors are warm by association with warm objects (fire, sun, desert); cool colors are cool by association with cool objects (ocean, forests, ice).

- We developed critical thinking skills through looking at art from Seattle Art Museum and Tacoma Art Museum. We also used those skills in analyzing our own and peers’ art. We learned to ask clarifying questions, use evidence to question or explain creative choices, and construct meaning.

- We learned that warm colors often seem to come forward in a painting and that cool colors seem to go back (recede). Artists can draw our attention to certain areas in their compositions by placing warm colors right next to cool colors.

- We created watercolor paintings composed of nonrepresentational shapes that combined warm and cool color for emphasis or contrast.

At home you could talk about all the different colors you used to decorate. Are they warm or cool colors? Primary colors? Secondary colors? How do you draw attention to certain parts of your home with colors?

**Enduring Understanding**

- Mixing primary colors creates secondary and tertiary colors.
- Placing warm colors next to cool colors can create contrast and draw attention.