Activity: Color Theory
This lesson will introduce the students to the basics of color theory, as well as the ways in which artists use color to guide the viewer's attention through a paintings composition.

Grade Level: 9 – 12

Class Time: 1 -2 45-minute class periods

Students will be able to:
- Understand the basics of color theory
- Explain the ways in which color is used to create a sense of depth in a two-dimensional space
- Identify the ways in which the artist uses color to draw the viewer's attention to points within the composition

PASS Objectives Addressed:
High School- Visual Arts
Standard 1:1,2,3
Standard 2:5
Standard 3:1,3,4
Standard 4:2,3

Activities

A. The Color Wheel
This exercise is a very basic introduction to the fundamentals of the color wheel.

Vocabulary:
Hue- the name of a color; a basic color
Primary colors- the colors from which all other colors are made: blue, red, and yellow
Secondary colors- the colors that are created from equal amounts of two primary colors: purple, orange, and green
Complementary colors- a pair of colors that are opposite each other on the color wheel: blue and orange; red and green, yellow and purple

Materials: Red, yellow, and blue colored pencils—enough for the entire class to use or share, rulers, compasses, 8.5" x 11" copy paper, pencils.

Background for teachers: The primary colors are red, yellow, and blue. All colors on the color wheel are created from these three colors. The secondary colors are made from mixing equal parts of the primary colors. Red and yellow make orange. Red and blue make purple. And yellow and blue make green.

Complementary colors are pairs of color that are opposite each other on the color wheel. The two colors in a pair of complementary colors are highly contrasting and together create a vibrant color scheme.

Instructions:
1. Using the compasses and pencils, instruct the students to draw a 10" circle on their copy paper.
2. Divide the circle into six equal 'pie pieces' with the ruler.
3. With a pencil, number the six sections from 1 to 6.
4. Using consistent pressure and even strokes, color sections 1, 2, and 3 with the blue colored pencil.
5. With the same consistent pressure and even strokes, color sections 3, 4, and 5 with the red colored pencil. This will cover one blue section with red, which should create a purple section.
6. Again, with consistent pressure and even strokes, color sections 5, 6, and 1 with the yellow colored pencil. Section 5 should become orange, and section 1 should become green.

7. Have the students identify each color by labeling the name: blue, red, yellow, purple, orange, and green. These are the colors' hues.
8. Next, instruct the students to identify which colors are primary and which colors are secondary. Blue, red, and yellow are primary. Purple, orange, and green are secondary.
9. The students may now identify pairs of complementary colors by identifying the colors opposite each other on the wheel. The complementary colors are: blue and orange; red and green, yellow and purple. Have the students experiment with the complementary colors by using them next to one another on scratch paper or the other side of their copy paper.
10. The students should now have a basic understanding of the basics of color. This color wheel may now act as a reference for the rest of the exercises in this lesson.

B. Color Saturation: Drawing the Viewer's Eye

When working with color, artists make many choices that are designed to draw the viewer's attention to particular details, objects, or figures in an image. The following exercise will help students investigate the use of color in two paintings to see how the artists use color to grab their attention.

Vocabulary:

Saturation- the purity of a color; how intense, bright, and/or concentrated a color is; a fully saturated color should be devoid of all grays and is considered a pure hue

Instructions:

1. Begin by having the students view *Oklahoma Black Gold* by Jeff Dodd.

   Ask the students to notice where their eye is drawn to first in the image. They will most likely mention the Osage warrior shield in the background or the arms of the workers in the center. Why do they think their eye is drawn to this point in the composition first?

   Note that when looking at a painting, one's eye is usually drawn to the lightest points within a composition, as well as the points with the brightest or most vibrant color. Introduce the definition of saturation from the vocabulary list above. Ask the students which colors in the painting are more vibrant and saturated. They might note that the vibrancy of the Osage shield is highlighted by the surrounding color of the complementary blue sky. Or they may notice the way the workers' arms stand off from the dull colors behind them. In addition, our eye tends to be drawn to warmer hues such as orange and gold.

2. How can an artist draw the viewer's attention to a particular point in a composition without using muted tones? Have the students view *We Belong to the Land* by Jeff Dodd.

   In this image, significant portions of the canvas are covered with a variety of vibrant colors. Ask the students to think about the following questions as they view the painting:

   - What are their eyes drawn to first?
   - Why do they think their eyes are drawn to these points in the composition?

   The cattle in the foreground will surely draw their attention. Using the color wheel from the previous exercise, have the students identify the relationships between the colors that are used in the foreground, middle ground, and background of the painting. They should discover numerous points where complementary colors are placed either next to each other or in close proximity: the orange in the state seal against the blue sky; the reddish glow of the cattle against the green grass. In each of these cases, Dodd's decision to place contrasting colors near each other draws attention to these points in the painting.

C. Warm and Cool Colors

Warm and cool colors in a painting can create different atmospheric effects, including the illusion of depth. This exercise will help the students analyze the effect of warm and cool colors in painting.

Vocabulary:
Color temperature- the relationship between warm and cool colors; the warmth or coolness related to a color
Warm colors- the red side of the color wheel is said to be warm and associated with heat
Cool colors- the green side of the color wheel; these colors are associated with coolness and calmness

Instructions:

1. Begin by asking the students to identify the warm and cool colors using their color wheels from the first exercise. They should identify red, orange, and yellow as warm colors and blue, green, and purple as cool colors.

2. Next, have the students view *The Earth and I Are One* by Kelly Haney. Ask them to identify the warm and cool colors in the painting.

   Many times, objects meant to be in the foreground are painted with warmer hues and placed at the bottom of the composition. In addition, objects in the background which are further away are painted with cooler colors and placed higher in the composition. Have the students view the painting and ask them to consider the following questions while they are observing the painting:

   - Why do you think the artist placed the warm and cool colors in particular areas?
   - Where are most of the warm or cool colors in the imaginary space of the painting? (i.e. are warm or cool colors mostly found in the foreground, middle ground, or background?)
   - Does the placement of these warm and cool colors have an impact on whether or not objects appear close or farther away?

   Note that our eye gravitates towards colors at the warmer end of the spectrum. Warmer tones also appear to move forward, particularly when placed in contrast to cooler colors. While the canvas remains a two-dimensional space, warm and cool colors, when arranged in particular ways, can create the illusion of depth within the space. Not only do warm colors appear to move forward, but cool colors appear to move toward the background, particularly when warm and cool colors are placed next to each other. Students should also note that the less saturated colors appear to fall back as well, resembling the atmospheric perspective that we perceive when we are looking at things far away. For example, when we look at mountains in the distance the color of the trees on the mountains appear hazy and less green than those that are close to us.

3. Next, view *Beyond the Centennial* by Carlos Tello. Ask the students to identify the warm and cool colors in the mural.

   Either in individual writing or in small groups, have the students answer the following questions about the mural:
   - What do the students notice about the distribution of warm and cool colors in this painting?
   - How does the artist use color to help create a sense of depth in the image?
   - Why do you think the artist used warm colors for the central figure? What effect does that color choice have on the viewer?

   The students should recognize that the bulk of the warm colors are found on the left side of the composition and the cooler colors are on the right side. The land runners with their horses and covered wagons and the main figure in the middle are all painted with warmer hues. They also appear to be coming out towards the

viewer. The objects painted in cooler colors such as the oil rig, architecture and astronaut appear to be further away from the viewer.

Once all the students/groups have finished answering the questions the class should regroup and discuss their findings. Students should be sure to compare and contrast their findings with the findings of the other groups.

D. Assessment

Have students choose one of the following paintings from the Capitol Art Collection:

- *A Storm Passing Northwest of Anadarko*
- *Elk Herd in the Wichita Mountains*
- *Game Birds at Glass Mountain*
- *Spring Morning Along the Muddy Boggy*

Students should write a brief explanation of the ways in which the artist has used color in the painting to grab the viewer's attention, guide the viewers through the composition, and assist in creating a sense of depth within the painting.