“The Science of Color!”

Color is everywhere! Ever wonder how it works? Do colors look different next to other colors? Why do some things look far away and some look nearer to us? Do colors make you feel certain things? Color theory analyzes the science of color. Using layering techniques with colored acetate, tissue paper, and construction paper students will learn the vocabulary and application involved in color theory and use what they have learned to create unique pieces in the style of Josef Albers’ *Homage to the Square* paintings from the 1950s, 1960s and 1970s.

<table>
<thead>
<tr>
<th>Primary Colors</th>
<th>Secondary Colors</th>
<th>Complementary Colors</th>
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<tbody>
<tr>
<td><img src="image1.png" alt="Primary Colors" /></td>
<td><img src="image2.png" alt="Secondary Colors" /></td>
<td><img src="image3.png" alt="Complementary Colors" /></td>
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**Primary Colors:** 3 colors that cannot be mixed or formed by any combination of other colors. Red, Yellow, Blue.

**Secondary Colors:** 3 colors that are formed by mixing primary colors. Orange, Green, Violet.

**Complementary Colors:** These are any 2 colors that are opposite each other on the color wheel. Red/Green, Yellow/Violet, Blue/Orange.

**Cool vs Warm Colors**

Warm colors: reds, yellows and oranges. Cool colors: blues, violets, and greens. Warm colors advance and cool colors recede, affecting the perception of depth.

**Color Relativity**

The surrounding colors in the larger sections make each little square look lighter or darker than the other... but they are the same colors!
Josef Albers

Josef Albers was a famous painter born in Germany in 1888. In his paintings between 1950 and 1976, Josef Albers used a single shape – the square – to emphasize color relationships and interactions. He called these paintings “Homage to the Square.”

“Homage to the Square” in the classroom!

Provide a selection of squares in different colors, sizes, and materials for students to use (recommended: construction paper, tissue paper, colored transparent acetate). The students will choose from a variety of squares to be glued on a background of colored construction paper, creating a collage. The students will use what they have learned about color theory (above) to incorporate color theory terms and varying chromatic interactions.

Things for the students to think about:

- Why did you choose those colors?
- Do you want to use primary colors? Secondary colors? Both?
- What happens when you put 2 complementary colors next to each other?
- What happens when you put a warm color next to a cool color?
- Are you seeing differences in the way colors look when next to each other?