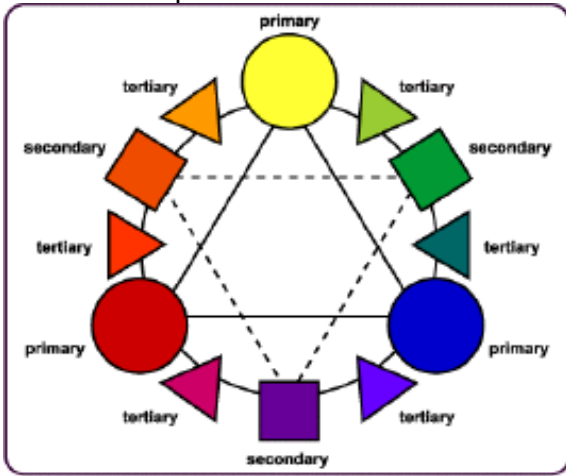


# Color Theory

PNWD Arrangement Seminar, Oct 28, 2016

By JoAnn Brehm

**Color Theory** is a set of principles used to create harmonious color combinations. Color relationships can be visually represented with a color wheel — the color spectrum wrapped onto a circle. **Color** is the most important and influential element of design. Color is the visual response to reflected light rays and triggers emotional response.



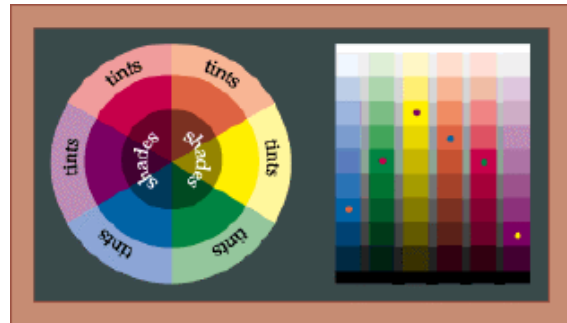
There are three **Primary Colors**:  
**Red, Yellow, & Blue**

There are three **Secondary Colors** (made of an equal mixture of two primary colors):  
Red & Yellow = **Orange**, Yellow & Blue = **Green**, Red & Blue = **Violet**

There are six **Tertiary/Intermediate Colors** (made of an equal mixture of a primary and secondary color):  
Example: **Red & Orange = Red Orange**

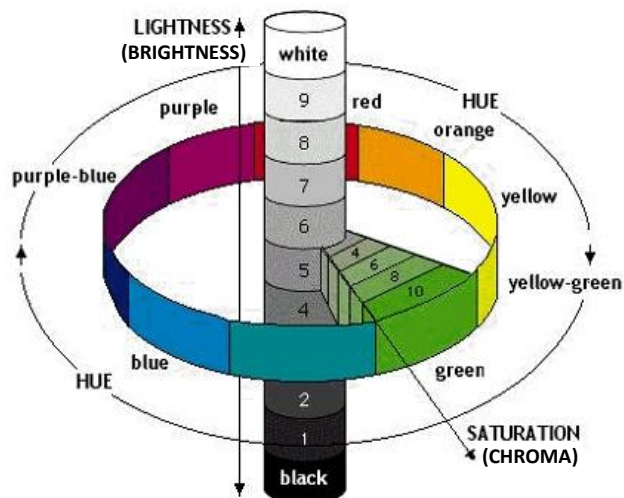
## FACTORS OF COLOR

1. **Hue**, which is synonymous with the word color, is the name of a color. Each color has the physical properties of **value** and **chroma**.
2. **Value** is a color's lightness or darkness.
  - a. **Tint is a light value** and is achieved by **adding white to the hue**. Pink is a **tint** of red.
  - b. **Shade is a dark value**, achieved by **adding black to the hue**. Burgundy is a **shade** of red.
3. **Chroma** is the brightness or dullness of a hue, the degree of intensity or grayness, the purity of a color.
  - a. **Tone** is a color with neutral gray or a complementary color added, to make it dull. Dusty rose is a **tone** of pink. A color of high intensity has no gray or complementary color added.



## THE THREE AXIS OF COLOR (contributed by John Moe)

Note: Judging guidelines use the term brightness vs. lightness and chroma vs. saturation on this diagram



**Related Color Harmonies are Monochromatic and Analogous.**

- **Monochromatic** harmonies are one color ( a single hue) only but can include value and chroma of that color. Example: red and its varying tints and shades.
- **Analogous** harmonies are neighboring or adjacent hues/colors. Technically includes one primary color with adjacent colors on the color wheel, which forms a 90° angle.



**Monochromatic**



**Analogous , cool & warm**



**Unrelated Color Harmonies are Direct Complementary, Split Complementary and Triadic.**

This harmony uses two hues that are opposite each other on the color wheel. When used together in a design they make each other seem brighter and more intense.

- **Direct Complementary** color harmonies are two colors that are directly opposite each other on the color wheel.
- **Split Complementary** color harmonies are colors on either side adjacent to the direct complementary color. If green is the color, the split complementary colors would be redviolet and red-orange that are adjacent to the direct complementary color red. This color harmony is often found in nature.
- **Triadic** color harmonies are composed of three hues equally spaced on the color wheel, for example red, yellow and blue.



**Red & Green**



**Orange & Blue**



**Yellow & Purple**

A word about **Foliage & Color** - The green in foliage is often considered neutral in floral design. Foliage used as a focal point or accent should adhere to a color harmony.

A word about **Cool & Warm Colors** – Warm colors are orange and yellow (advancing colors). The cool colors are green, blue and violet (receding colors).

**COLOR IS INVOLVED IN ALL PRINCIPLES OF DESIGN**

**Color dominance** may be used to create unity in an arrangement.

**Color rhythm** is achieved by repeating colors throughout a design.

**Color balance** involves distributing the visual weight of a color to add interest.

**Color proportion** is good if unequal amounts of different colors, light and dark values, cool and warm colors and weak and strong colors are used.

**Color contrast** creates interest.

**Scale** within color may deal with the size of one component of the design and its color relationship to the **size** of another component of the same color intensity.

**THEN THERE IS THE DESIGN TYPE – Modern Bold, Traditional Subdued...**