

# A Guide To Color

## Guide C-316

Susan Wright, Extension Consumer Education and Health Specialist

Cooperative Extension Service  
College of Agriculture and  
Home Economics



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Color is one of the most important stimuli in the world. It affects our moods and personal characteristics. We speak of blue Mondays, being in the pink, seeing red, and everything coming up rosy. Webster defines color as the sensation resulting from stimulating the eye's retina with light waves of certain lengths. Those sensations have been given names such as red, green and purple.

Color communicates. It tells others about you. What determines your choice of colors in your clothing? In your home? In your office? In your car? Your selection of color is influenced by age, personality, experiences, the occasion, the effect of light, size, texture and a variety of other factors.

Some people have misconceptions about color. They may feel certain colors should never be used together, certain colors are always unflattering or certain colors indicate a person's character. These ideas will limit their enjoyment of color and can cause them a great deal of frustration in life. To get a better understanding of color, look at nature. Consider these facts:

- The prettiest gardens have a wide variety of reds, oranges, pinks, violets, purples and yellows all mixed together.
- There are un-numbered shades of greens in a forest, in the desert and in the ocean.
- The sky can change its blue from moment to moment, and what begins as blue becomes pink and violet or orange and crimson as the sun sets.
- Even the soil boasts a variety of colors, from whitest white to coal black, with numerous colors in between.

Color makes life interesting.

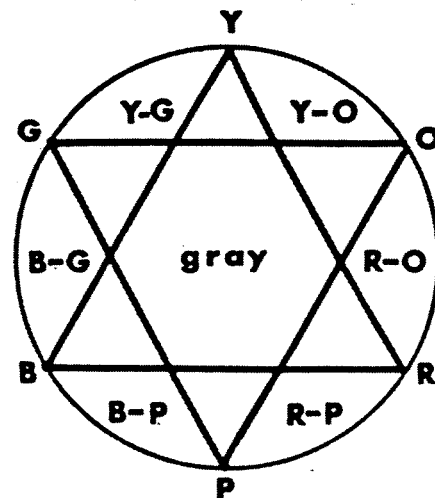
To use color effectively, you must understand some basic color facts. There are three dimensions of color:

- Hue is another word for color. It usually indicates a modification of basic color. Red is a color; orange is a reddish hue.
- Value refers to the lightness and darkness of a color. A light color is a tint. For example, pink is a tint of red. A dark color is called a shade. Forest green is a shade of green.
- Intensity refers to the brightness or dullness of a color such as a bright yellow or a dull yellow.

## QUALITIES OF COLOR

### Hue

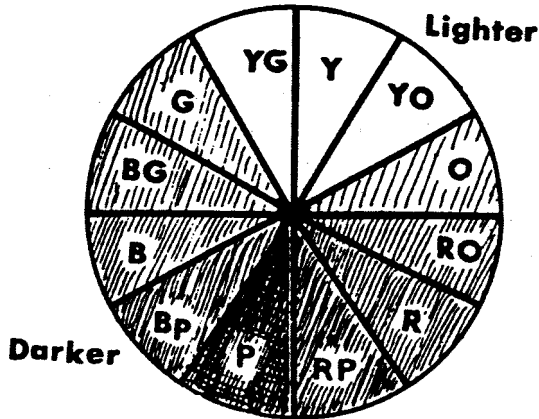
A widely accepted theory of color is based on the idea that all colors or hues are derived from the three primary colors—red, yellow and blue. All other colors or hues come from mixtures of these primary colors. Thinking about colors around you and where they might be placed on a color wheel will help you see color relationships.



*Primary colors:* red, yellow and blue  
*Secondary colors:* green, orange and purple  
*Intermediate colors:* yellow-orange, red-orange, red-purple, blue-green and yellow-green  
*Gray:* combination of all pigments

Further mixing of neighboring colors produces many other colors and color gradations. Mixed colors can be considered as relatives because they have common ancestors. You will note that any mixed color fits into the color wheel, according to the amount of yellow, red or blue it contains.

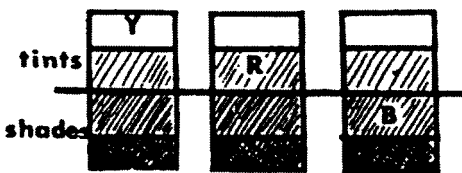
There are three neutrals; black, white and gray are not true colors or hues. They are achromatic colors. Black results from the complete absorption of light rays. White is a reflection of all the rays that produce color. Gray is an imperfect absorption of the light rays or a mixture of black and white.



**Value**

Value, the second dimension of color, describes the lightness or darkness of a color. You have a choice within each color family from light to dark colors.

Colors follow a natural order. In a rainbow, yellow is the lightest color. Yellow-red or orange is somewhat darker. The blues and purples are darkest of all. We can say that warm colors are lighter than cool colors in their natural order from light to dark.

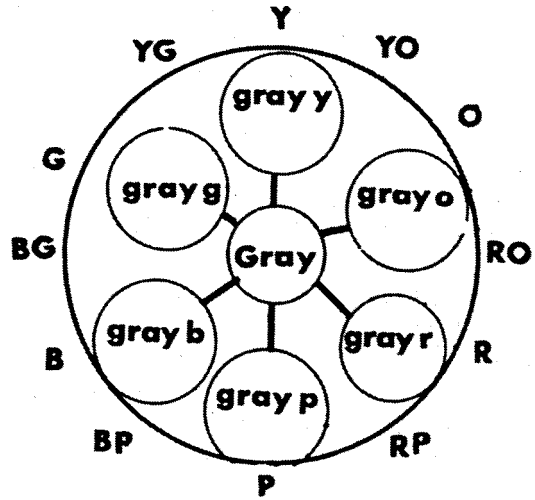


**Intensity**

The third characteristic of color is intensity. Intensity is the dimension of color that tells the brightness or dullness, its strength or its weakness. Intensity describes the distance of the color from gray on the color wheel.

Colors in the outer circle of the color chart are full intensity because they are as bright as each color can be. As colors go down in brightness, toward neutral gray or no color, they are said to be dulled or low intensity.

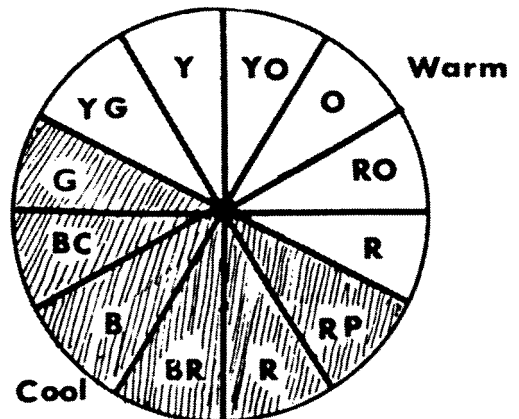
It is easy to see the difference between vivid red and dull maroon, or between bright orange and dull brown or beige. It is sometimes more difficult to recognize that a dusty pink is duller than a clear, fresh pink.



**Warm or Cool Colors**

Colors are considered warm if they contain enough yellow or yellow-red. They are considered cool if they contain a noticeable quantity of blue.

There are warm and cool versions in each color family. Purple-red or bluish-red is the cool version of red. Aqua is an example of a warm version of a cool color because some yellow had to be mixed with the predominately blue color.



In summary, the three qualities of color are hue, value and intensity. There can be both light and dark colors in a bright or vivid group of colors, and light and dark colors in a dull or subdued group of colors.

### TIPS FOR COMBINING HUES, VALUES AND INTENSITIES

#### Combine Warm and Cool Colors

Contrasting colors make each other seem more intense when used together. Warm colors make cool ones seem cooler, and cool colors make warm ones seem warmer.

The duller a color becomes, however, the less power it has to make its complement look brighter. A dull color is more likely to emphasize, through repetition, other colors related to it. For example, a camel coat (orange hue) would emphasize blond hair and creamy skin more than it would blue eyes (complementary color).

Usually, unequal amounts of warm and cool colors are most pleasing because the color combination will create a unified idea of either warmth or coolness.

#### Combine Light and Dark Colors

Some contrast of light and dark is needed in a color scheme. Try combinations using only light colors, then try combinations using only dark colors. Some variation in value is needed for interest.

Strong light and dark contrasts are the most striking. For example, light cream with dark brown is more striking than dark tan with medium brown.

Make pleasing combinations by keeping the natural color in mind and combining a lighter warm color with a darker cool color.

#### Combine Bright and Dull Colors

Colors go together well when the quality of brightness is nearly the same. Brighter color combinations look cheerful, and duller ones soft and restful. Some of the dull color combinations may appear even somber or drab.

A small amount of bright color used with subdued color can improve a color scheme. Combine a bright accent color with a dull-colored costume. If too much bright color is used, dull colors look even duller.

### STANDARD COLOR HARMONIES

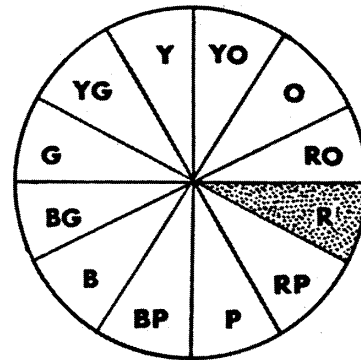
Color combinations can be contrasting or related, according to their placement on the color wheel. Contrasting colors are those that lie some distance apart on the color wheel. Related colors are those that lie side by side, or near one another on the color wheel. Standard color harmonies are outlined below, but many other variations are possible.

#### Related Harmonies

Related color harmonies are those in which the colors are similar. They include the one-hue (monochromatic) harmony and the analogous harmony.

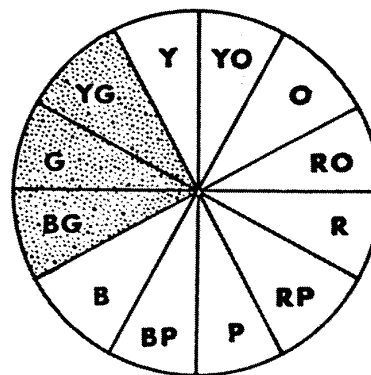
##### *Monochrome (one-hue)*

- Simplest scheme
- Uses differences in value and intensity (such as pink, red and rose together)
- Texture contrasts help
- Beware of tiresome, boring effect



##### *Analogous (neighbors)*

- Shows one color running throughout the entire group of colors
- Uses different values and intensities
- Quiet, restful effect
- Warm and cool related schemes possible

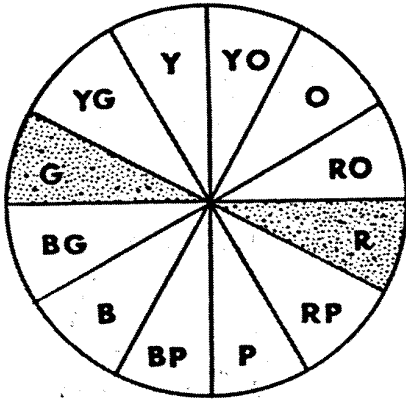


## Contrasting Harmonies

Contrasting harmonies are classified as complementary, double complementary, split complementary and triad. Combinations of opposite colors on the color wheel are more difficult to use than those of neighboring colors. Special care must be taken when using contrasting harmonies in clothing. However, when done properly, they are richer than related harmonies, and more satisfying to the eyes.

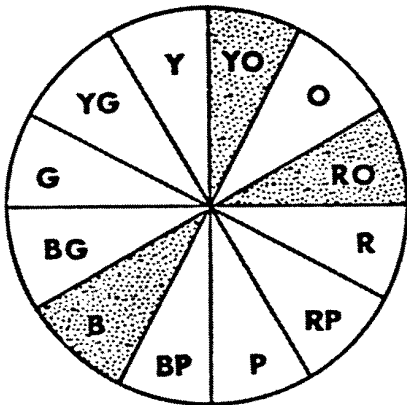
### Complementary

- Two colors opposite each other on the color wheel
- Reddish hues are hardest to handle
- One of the complements used should be dull, light or dark, or in small amount



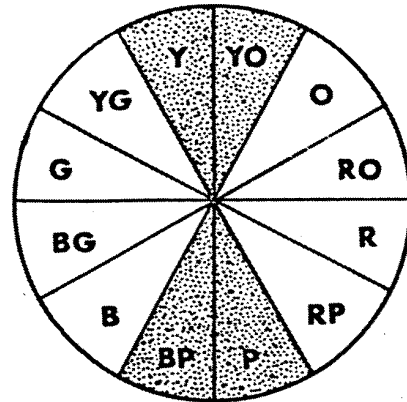
### Split Complementary

- Combines a primary color with colors on either side of its complement
- Cannot start with a secondary color because its complement, a primary, cannot be split
- Adjust amounts of different values and intensities



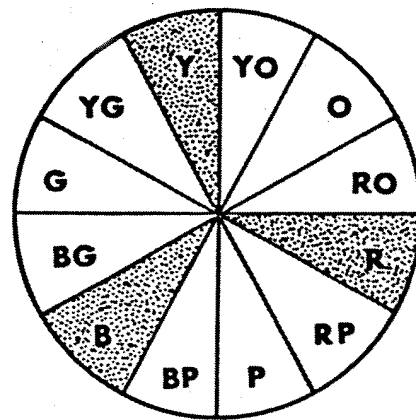
### Double Complementary

- Two directly adjacent colors and their complements used together
- Pick only one hue to be outstanding and used in largest account (dulled)
- Vary intensities and values of other hues, as well as amounts



### Triad

- Richest harmony if well-used
- Equilateral triangles create triads such as Red, Blue, Yellow; Green, Orange, purple; Yellow-Purple, Blue-Green, Red-Purple; AND Yellow-Green, Blue-Purple, Red- Orange.



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