“The deepest and truest secrets of color effect are, I know, invisible even to the eye, and are beheld by the heart alone.” Johannes Itten

COLOR

Color

Objects have no color of their own, they display an ability to reflect specific wavelengths of white light.

Blue objects absorb all the rays of light except the blue ones, these are reflected into our eyes.

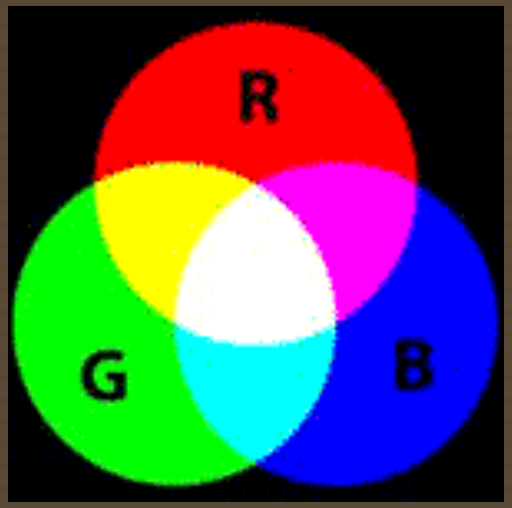
The significance of this fact is that as light changes, color will change.

Color Systems

Additive System- light is mixed or “added” to create color.

Color as a result of combining separate wavelengths (colors) of light from different sources.

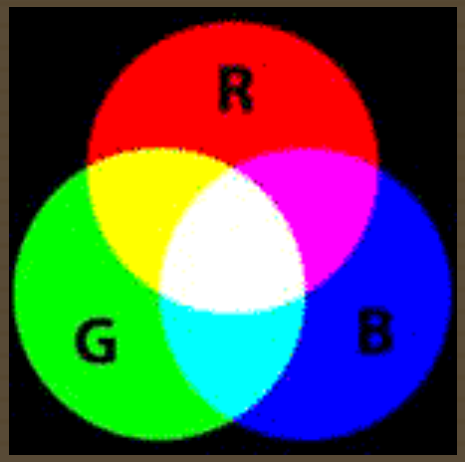
Light is composed of: Red, green and blue
Used in electronic media



Primary Colors of Light

The three primary colors of light are red, green, blue.

Separate colors of light combine to form white light. Black is absence of all colors



Color Systems

Subtractive System-

Pigments are mixed and light reflects a specific color.

This is subtractive because it “subtracts” or absorbs all the other colors except the specific hue that is reflected into our eyes.

Used in any painted/printed piece

Primary Colors of Paint

The three primary colors of paint are red, blue and yellow.

These colors combine to give you a neutral grayish muddy color.

In the ideal world, they would combine and form black.

First Property of Color: Hue

Hue - the first property of color.

It refers to the name of the color on the color wheel.

Hue and color are often used synonyms, but the term color refers to the name of the color - pink, rose, magenta, etc.

Color Mixing

All colors can be mixed from the basic colors. These are called primary colors.

Mixing equal parts of any two primary colors will yield one of the *secondary colors*

Tertiary colors are achieved by a mixture of primary and secondary hues

A relatively simple device that shows the relationships among colors is the *color wheel.*

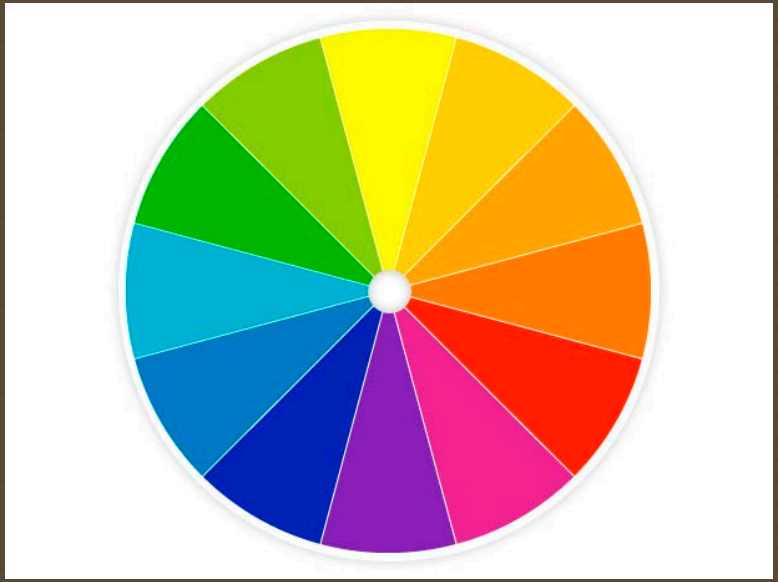
Color Wheel

an organization of the relationships of color into twelve hues.

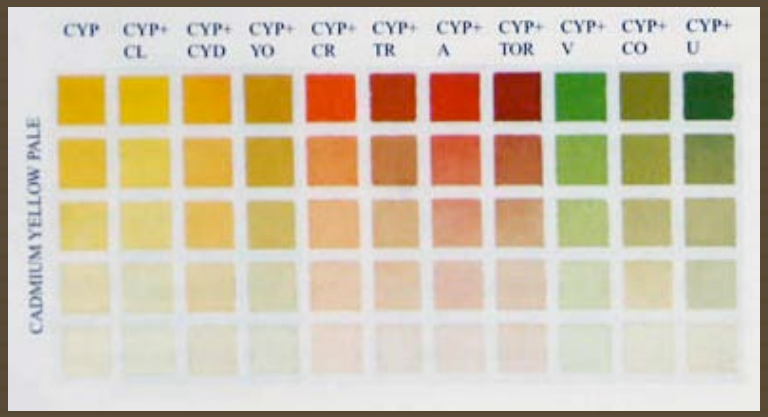
Primary colors - 3 colors: red, yellow and blue (magenta, yellow and cyan for printing).

Secondary colors - 3 colors: red + yellow = orange, yellow + blue = green, red + blue = purple. These colors are a mixture of two primaries.

Tertiary colors - 6 colors: red orange, orange yellow, yellow green, blue green, red purple. These colors are a mixture a primary color and its adjacent secondary color.



The second property of color: Value

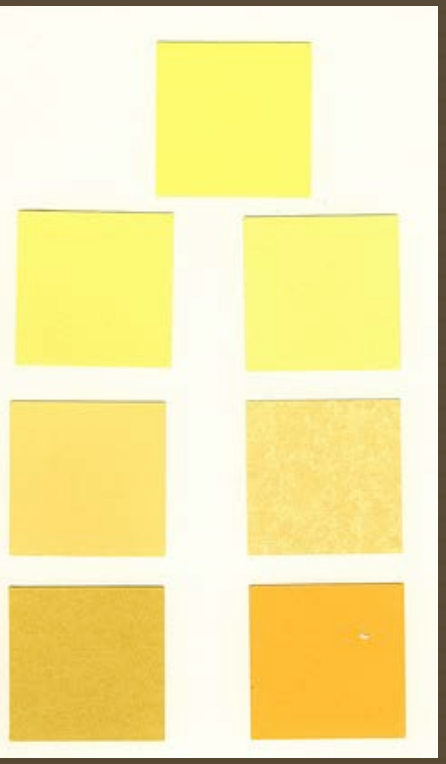


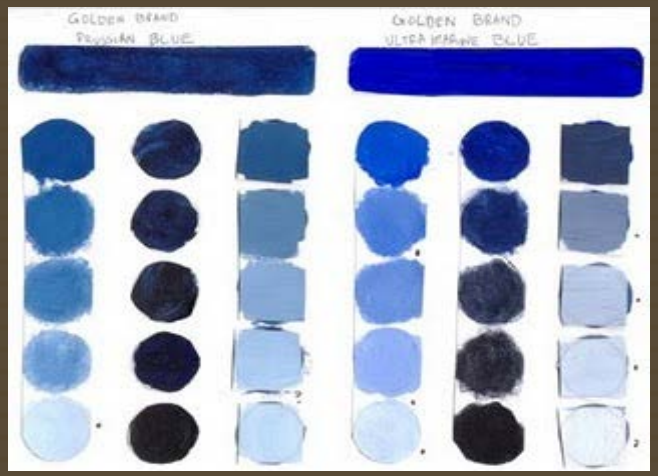
This refers to the lightness or darkness of a hue.

Tint - the result of adding a lighter color such as white.

Tone - the result of adding a combination of white + black=grey
Shade- the result of adding black.
s are on the dark side of the value scale.

Color and Value





Each color has a inherent value. Take for an example yellow and blue.

Yellow is a lighter value therefore it will have more tones than tints.

Blue on the other hand is a darker value, therefore it will have more tints than tones

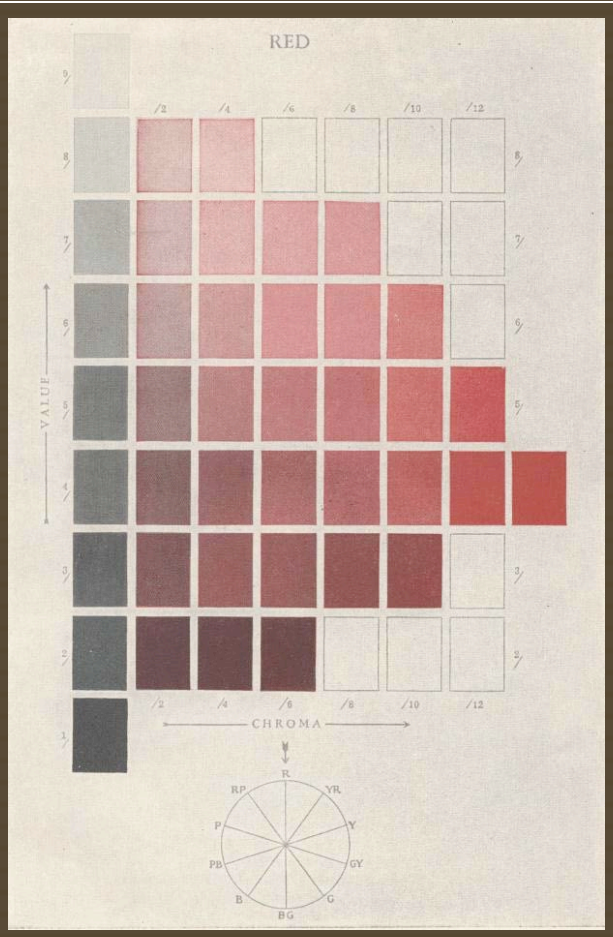
Third Property of Color: Intensity

Intensity - A color's brightness.

The purity of the color.

Color is at its fullest when it is unmixed and pure.

Because color is relative, a color can appear more intense when it is surrounded by colors that are less intense.



Decreasing Intensity

Neutralizing a color or lowering its intensity can be achieved when a color is mixed with any other color.

This change is small in contrast when a neutral gray is mixed with the hue.

When mixing a hue's complimentary color you can also lower the intensity.

Complementary colors - blue/orange, red/green, yellow/purple.

Increasing Intensity

A color can be be made brighter by

- using simultaneous contrast
- adding a color that has greater intensity

Simultaneous contrast - example blue appears more brilliant when placed next to orange.

Color Schemes

Monochromatic Color Scheme -
the use of only one hue and white and black to tint and tone the hue.

Analogous Color Scheme

the use of several hues that are next to each other on the color wheel.

Red, Orange and yellow are an example.

Complementary Color Scheme

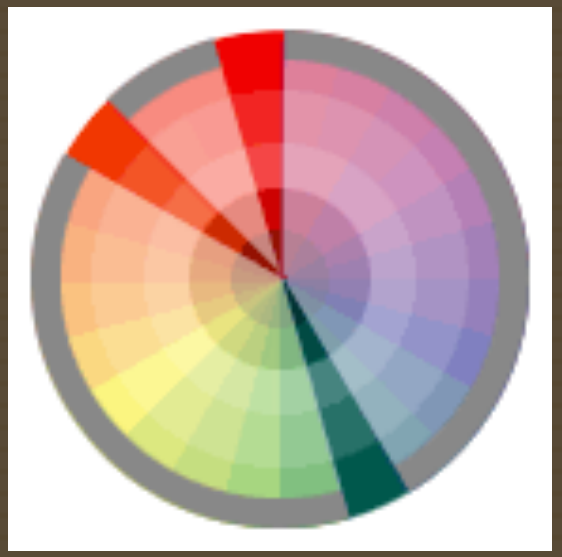
One hue and its opposite color on the color wheel.

Example - Orange and Blue.

Split-Complementary Color Scheme

Two hues that are next to each other and one color that is opposite to one of the two colors on the color wheel.

Example - Red, Orange, and Blue.
Or red, yellow-green and blue



Triadic Color Scheme

Three hue equally spaced on the color wheel.

Red, Yellow, Blue.

Orange, Green, Purple is another.

Color Temperature

Certain colors cause psychological effects of cool and warm.

Warm Colors - Generally speaking they are Red, Orange, and Yellow.
Associated with heat, fire, sun

Cool Colors - Generally speaking they are Green, Blue, Purple.
Associated with water, sky, ice