

COLOR

BASIC INTRODUCTION

COLOR BASICS

Color is the perceptual characteristic of light described by a color name.

Specifically, color is light, and light is composed of many colors—those we see are the colors of the visual spectrum: red, orange, yellow, green, blue, and violet. Objects absorb certain wavelengths and reflect others back to the viewer's eye.

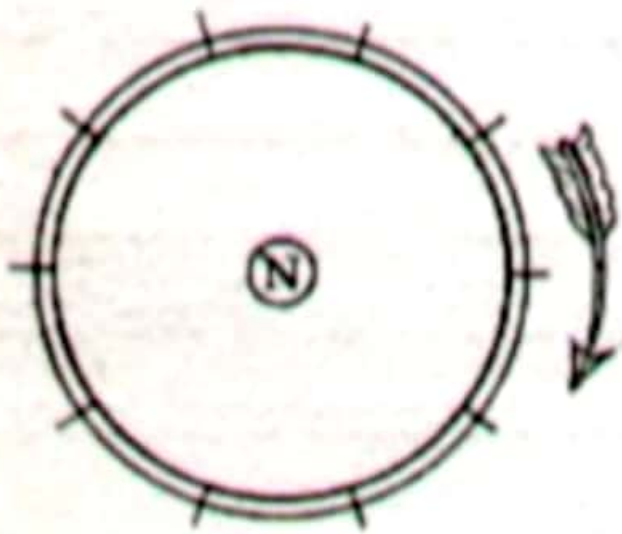
We can perceive these wavelengths as color...unless your colorblind!

However...

mixing solid pigment to match reflected light waves is the real illusion.

Color Theory is highly expansive into a lifetime of study. It is best to look at the Munsell Color system to begin...

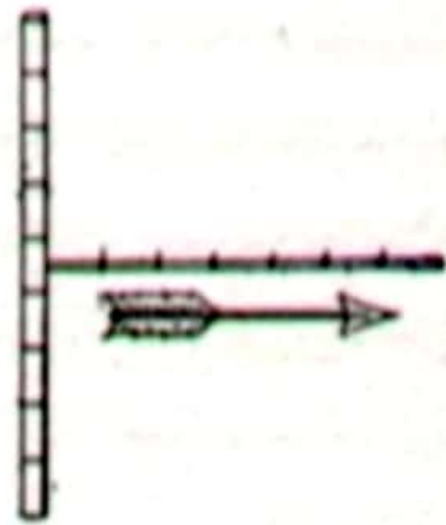
Munsell color system is a color space that specifies colors based on three color dimensions: hue, value (lightness), and chroma (color purity). It was created by **Professor Albert H. Munsell** in the first decade of the 20th century and adopted by the USDA as the official color system for soil research in the 1930s.



HUE



VALUE



CHROMA

So, according to Munsell's system
color is described in three ways:

HUE/Color

CHROMA/Saturation/Intensity

VALUE/Lightness

Although pink, crimson, and brick
are all variations of the color red,
each hue is distinct and
differentiated by its saturation,
value and hue

Let's look at each more Indepth...



Katie McGaha

1. HUE or COLOR

HUE:

This first dimension is defined by Albert Munsell as "The quality by which we distinguish one color from another, as a red from a yellow, a green, a blue or a purple" according to its location on the spectrum

Hues are basic colors we learn to connect with words as children.



Candy Canes Study in Oil by Madison Boone

2. VALUE

Value means Light and Dark and the varying shades between. Albert Munsell's definition, "The quality by which we distinguish a light color from a dark one."

Grayscale

A grayscale is a series of neutral colors, ranging from black to white, or the other way around.



2. VALUE

Shade and tint:
are terms that refer
to a variation of a hue

Shade:
A hue produced by
the addition of Black.

Tint:
A hue produced by



katie mcgaha

and strength of a hue.

Saturation or Intensity is usually determined a certain color and measured as percentage value.

Saturation defines a range from pure color (100%) to dullness (0%)
A pure color is fully saturated.



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COLOR

When mixing paint and planning with color think:

- Can I go lighter? +white
- Can I go darker? +black
- Can I go less intense? +grey or +compliment
- Can I change the hue? +add another hue
- Can I alter the color by placing it near other colors?

P-S-T

Primary Colors:

Colors at their basic essence; those colors that cannot be created by mixing others.

Secondary Colors:

Those colors achieved by a mixture of two primaries.

Tertiary Colors:

Those colors achieved by a mixture of primary and secondary hues.



MONOCHROMATIC COLOR



RED and CHAIRS by AMBERLYE SUMNER

MONOCHROMATIC:
Creating an image with only
values relating to the color.

Hue+Tints
Hue+Shades
Hue+Tones



Kaolin Porter

COMPLIMENTARY COLOR

COMPLIMENTARY

Colors used that are opposite of the color wheel.

Used to create contrast in an image.



CANDY CANES STUDY IN OIL BY LIZZ REDD



SELF PORTRAIT IN PLANES STUDY BY WYLIE FALK

ANALOGOUS COLOR

ANALOGOUS:

Color scheme that used colors that are next to one another on the color wheel.

Often described as
Warms or Cools

Used to create
Harmony or Unison
in an image.



Cupcake study in Oil by Kaolin Porter



Monochromatic



Analogous



Complementary



Here's why your favorite colors look so great together...



Monochromatic scheme

Create a clean, subdued palette by choosing colors that are shades and tints of the same hue, such as a cool purple.

Analogous scheme

Enrich a harmonious palette with adjacent colors, such as blue, blue-green and green.

Triad scheme

Vibrant balance is achieved when you choose three colors equally positioned on the color wheel, such as blue-green, yellow-orange and red-purple.

Complementary scheme

Stand out with maximum contrast by choosing colors opposite one another on the color wheel, such as blue and orange.

Split Complementary scheme

Decrease tension while maintaining strong contrast by choosing one color, then picking two others equally spaced from its complement, such as red-purple, green and yellow.

PALETTE

PALETTE:

Either the surface an artist uses to mix pigments or the collection of colors chosen to create the image

Example on the right is the ZORN color palette. Notice how an artist can create variation with only 4 colors of pigment: Ivory Black, Cad Red, Yellow Ochre, and Titanium White

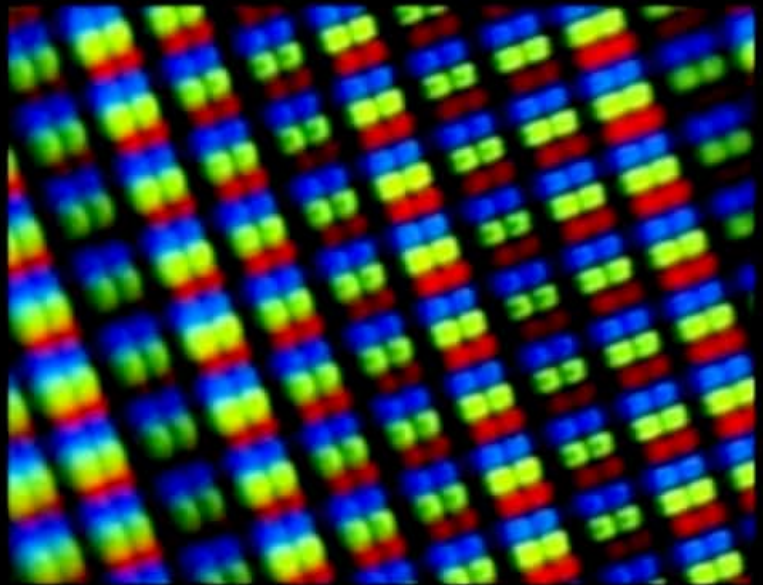
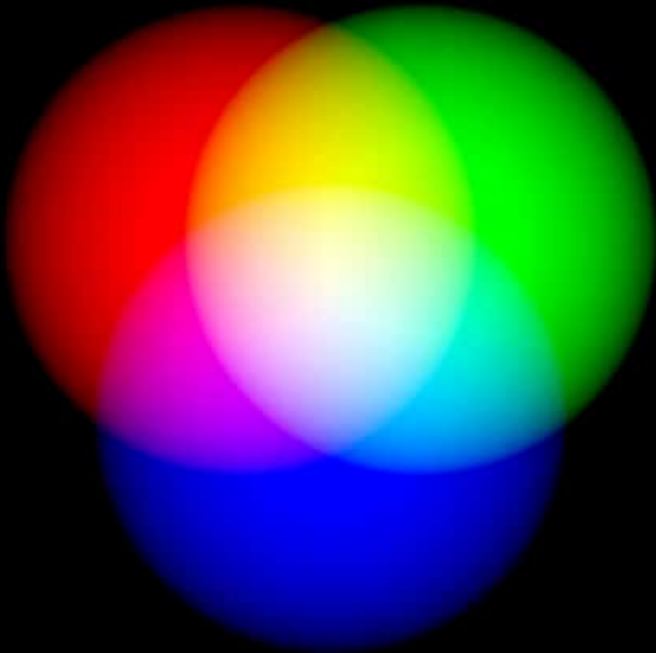
ZORN PALETTE

Y= YELLOW OCHRE R= CADMIUM RED MEDIUM B= IVORY BLACK

	Y	YR	YR	YR	R	R	R	R	B	B	B	B
	PURE	2:1	1:1	1:2	PURE	2:1	1:1	1:2	PURE	2:1	1:1	1:2
100%												
80%												
60%												
20%												
5%												
5%												
20%												
60%												
80%												
100%												
	TRACE OF BLACK				TRACE OF YELLOW				TRACE OF RED			

COLOR AS LIGHT

- RGB: Red, Green, Blue
- Used for old tv screens and monitors and website images



COLOR AS PRINT

Solid Ink Density	Offset Newspaper			
Cyan	0.90			
Magenta	0.90			
Yellow	0.85			
Black	1.05			

SNAP Tolerances +/- 0.05				
Dot Gain @ 25%	C	M	Y	K
Offset (100 lpi)	32%	32%	32%	32%

SNAP Tolerances +/- 3%				
Dot Gain @ 50%	C	M	Y	K
Offset (100 lpi)	32%	32%	32%	32%

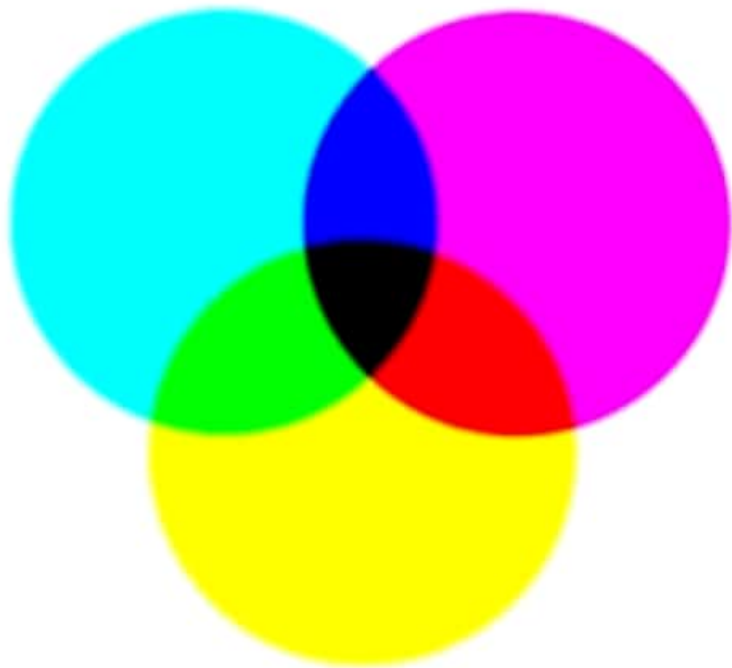
SNAP Tolerances +/- 4%				
Dot Gain @ 75%	C	M	Y	K
Offset (100 lpi)	20%	20%	20%	20%

SNAP Tolerances +/- 3%

- CMYK: Cyan, Magenta, Yellow and Key
- Key stands for Black indicating shades and value into the color
- Used for Print technology (think about the squares on cereal boxes and other products)

Notice the middle when all are mixed: pigment/grey and light/white

CMYK



RGB

