All You Want to Know About Color

Color! It is all around us. It makes things interesting, livens up our environment and brings us joy. What is not to love about color? I have my favorites and I know you do too. Our world is filled with endless combinations of colors, but what is color really?

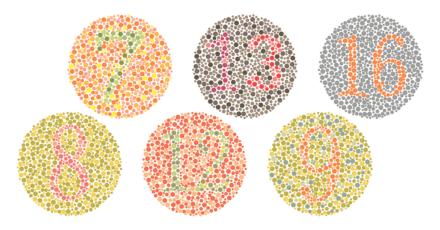
<u>Col·or</u> /'kələr/ - Noun, the property possessed by an object of producing different sensations on the eye as a result of the way the object reflects or emits light.

We know that light contains a whole spectrum of colors. Each color is actually a wave or specific energy of light that we can see when separated using a prism. We can see this effect when a rainbow appears in the sky during an early morning or late evening rain storm.





Not all people can see colors the same way. Depending on your sensitivity, you may see colors brighter or less vivid than others. How many times have you had a discussion of a shade of color and not been able to agree with your friend over the exact meaning you were trying to convey? There have been discussions that suggest that women see more colors variations than men, but I am not convinced of this. I look at the artwork of master painters, most of which have been men over the years, and see brilliant work with colors. I do know that Color Blindness is a real thing that many people have. Color blindness occurs when you are unable to see colors in a "normal" way. I put normal in quote marks because I believe everyone has their own unique way of seeing colors and that there is no <u>ONE</u> way of perceiving colors. I have seen this occur many times in the art classes that I teach.



Color Blindness Test

"Color Blindness is also known as color deficiency. Color blindness often happens when someone cannot distinguish between certain colors. This usually happens between greens and reds, and occasionally blues.

In the retina, there are two types of cells that detect light. They are called rods and cones. Rods detect only light and dark and are very sensitive to low light levels. Cone cells detect color and are concentrated near the center of your vision. There are three types of cones that see color: red, green and blue. The brain uses input from these cone cells to determine our color perception.

Color blindness can happen when one or more of the color cone cells are absent, not working, or detect a different color than normal. Severe color blindness occurs when all three cone cells are absent. Mild color blindness happens when all three cone cells are present but one cone cell does not work right. It detects a different color than normal." – Source - https://www.aao.org/eye-health/diseases/what-is-color-blindness



We label colors into categories to help us to identify them better. It makes it easier to describe a color by its label.



<u>Primary Colors</u>: The basic 3 – Yellow, Red and Blue. With the three of these you can make any color in the world you want, well almost...

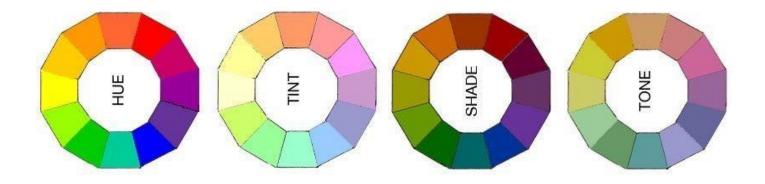
Secondary Colors: The result of mixing 2 of the Primary colors together.

- ♣ Yellow + Blue = Green
- ♣ Blue + Red = Purple (AKA Violet)
- ♣ Red + Yellow = Orange

<u>Tertiary Colors</u>: The results of mixing a Primary color and a Secondary color together.

- ♣ Yellow + Green = Yellow-Green
- ♣ Yellow + Orange = Yellow-Orange
- ♣ Blue + Green = Blue-Green
- **♣** Blue + Purple = Blue-Violet
- Red + Orange = Red-Orange
- ♣ Red + Purple = Red-Violet

But what about all the variations of these mixes? How are these attained and how do we categorize them??? What about black, white and all those neutral colors?



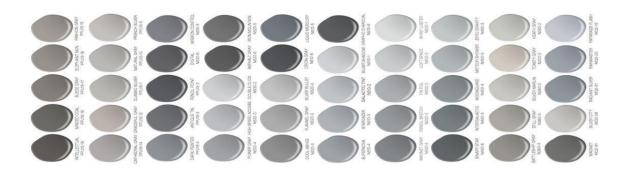
Well, we can further organize and define colors by using the following:

<u>Hue</u>: defined as both a color and a shade of color. It is the spectrum of colors and somewhat similar to what we call color. Each color hue has a different light spectrum or energy vibration.

<u>Tint</u>: defined as a hue of a color mixed with White. It is a paler variation of the original color. We can also describe it as a Pastel color.

Shade: defined as how dark a hue is when color is mixed with Black. It is a darker variation of the original color.

<u>Tone</u>: defined as the relative lightness or darkness of a color. One color can have almost endless variations of tone from lightness through darkness. Tone also describes the degree of intensity or strength of a color.



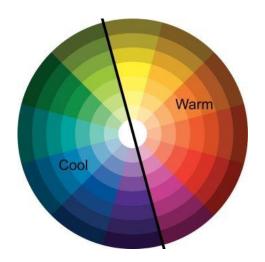
So that is pretty thorough, but what about Grey? Well, <u>Grey is a multi-dimensional being</u>. It is a **tint** of Black + White, it is a **shade** of White + Black <u>as well as</u> a **tone** of White + Black. Pretty cool don't you think?



BROW	N COLOR	NAMES	3
BROWN	CEDAR	CINNAMON	BRUNETTE
#7C4700	#4B3A26	#622A0F	#3A1F04
MOCHA	UMBER	TORTILLA	CHOCOLATE
#3B270C	#362312	#997950	#2B1700
SYRUP	GINGERBREAD	CARAMEL	WALNUT
#492000	#5C2C06	#613613	#43270F
PECAN	WOOD	HICKORY	ESPRESSO
#48260D	#402F1D	#351E10	#4B382A
PEANUT	TAWNY	COFFEE	RUSSET
#795C32	#7E481C	#4B3619	#7F461B
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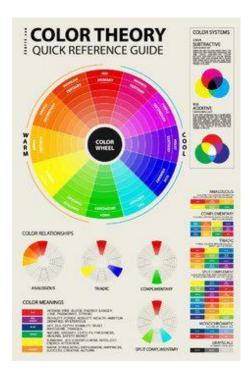


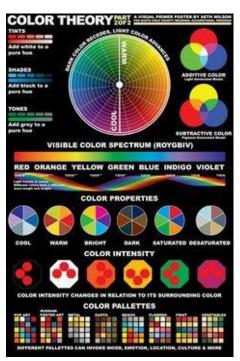
But what about those Neutral colors, like the Brown, Black and White? Browns are considered Earthy colors, Black is the presence of all colors while White is the absence of all colors. Neutrals are considered a category of their own. Brown is mixed with a little of each of the Primary colors.





And then there is the <u>temperature</u> of color. The color wheel is divided in half according to **Warm** (Yellow and Red Hues) and **Cool** (Blue Hues). Warm colors remind us of the Sun and Fire while Cool colors remind us of Water and Grass. There are a lot of ideas about why these colors make us feel either warm or cool, which is part of the psychology of color.







<u>Color Theory</u>: There is a ton of information regarding Color Theory! Everyone seems to have a definition of color, how it is broken down into numbers according to its placement on the color wheel, how it affects us emotionally, subliminally and economically. I feel there is a theory for every hue in the Universe. These are interesting to explore and learn about. Many have valid research and discoveries behind all the researches. So, lets skim over a few of these.

<u>Color Experts</u> – Pantone Color Institute are the go-to experts when color is critical. They have identified and categorized every color imaginable. They help businesses and creatives with color choices when it is of utmost importance. They have standardized colors for proper matching purposes, they forecast colors of the year, they have consulting services to help businesses which rely on color for products and images. They are a big resource for anything to do with color. A visit to their website is enlightening. Pour yourself a big cup of something and spend some time exploring their vast site. https://www.pantone.com/

"Pantone provides a universal language of color that enables color-critical decisions through every stage of the workflow for brands and manufacturers." Source - https://www.pantone.com/about/about-pantone

<u>Color Psychology</u> – Is the study of how colors (hues) affect human behavior. It is an important part of marketing, well-being and design. Colors really do affect how you feel, behave and react. Think about the color Red – it makes you think of passion, energy and action. It makes you crave and desire food – think Coco-Cola and McDonalds. Think about the color Green – it is a lively color, reminds you of growth and renewal – it is calming and reminds you of being in nature. There are many experts, researchers and interpretations of the psychology of color. If you Google Color Psychology you will find a wealth of interesting information.

<u>Color Therapy</u>: - Known as <u>Chromotherapy</u> – it is a "claim to be able to use light in the form of color to balance "energy" lacking from a person's body, whether it be on physical, emotional, spiritual, or mental levels" Source - https://en.wikipedia.org/wiki/Chromotherapy - In other words, it is a form of mental health therapy using colors. Being a very sensitive person, this sounds very plausible to me. It is still fairly new and research is still in progress about this type of therapy.

HOW TO CHOOSE

—— COLOURS ——

THAT WORK WELL TOGETHER



We know how hard it can be to choose colours when designing a logo, website or even your front room - follow these 6 simple universally accepted colour rules to become a colour expert quickly.

Analogous



Colours that are adjacent to each other.

Complementary



Colours opposite each other on the colour wheel.

Split Complementary



Colours adjacent to your main colours complimentary colour.

Triad



Three colours equally spaced around the colour wheel.

Tetradic



Two sets of complimentary colours.

Monochromatic



One segment of the colour wheel uses variation in lightness and saturation.

Warm / Summer Palette

Health Palette

Cold/Winter Palette



Cool/Tranquil Palette

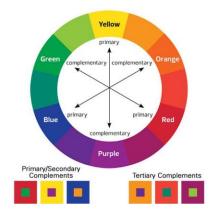
Sophisticated Palette

Luxury/Royal Palette



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With all of this technical and organizational information about color, how can we incorporate all of this into our artwork? It really helps to know this background information to make your work easier and much more enjoyable. There is still yet more organization to color that will help you to create stunning pieces of work and make it easier for you to choose colors that co-ordinate, compliment or clash with each other.



<u>Complimentary Colors</u> — are defined as color scheme using one base color and the color opposite of it on the color wheel. The base color is the main color and the compliment color is used as an accent. The accent color helps to accentuate the base color and make it really stand out. If the base color you are using is Yellow, its compliment is Purple. This combination is called a Primary/Secondary Complement. If your base color is Red-Violet, the complimentary color is Yellow-Green. These are both Tertiary Complements.

<u>Analogous Colors</u> – uses colors that are adjacent on the color wheel. They match very well together, are easy to work with and evoke a sense of calm. These colors are often found in nature, so they are good for landscapes. An example of an analogous color scheme is Red, Red-Orange and Orange.

<u>Split Complimentary</u> – are colors that are adjacent to your complimentary accent color. The base color is the main color with the secondary colors being used as accents. An example of this would be Purple (base color) with Yellow-Green and Yellow-Orange as the compliments.

<u>Triad</u> – are 3 colors evenly spaced around the color wheel. Think about an equilateral triangle and where each corner would lay on the color wheel. And example is Purple, Orange and Green.

<u>Tetradic</u> – are 2 sets of Complimentary colors which are evenly spaced on the color wheel with no one dominant color. This would be Blue, Orange, Red and Green.

<u>Monochromatic</u> – are all the color in a single hue. This can be a base color and you would use white and black to create variations.

What a lot about colors! One could make a lifetime career of the study of color and all of its properties and uses and effects and

Still we haven't even talked about actually using color. These guidelines will help you to start playing with colors more effectively. But, what about creating a palette of colors? What about your own preferences of colors? Starting with these rules will help you a lot. Experiment in your artwork and see how colors play or fight together.

I always tell my students to use their intuition and heart when choosing colors in their artwork. It never fails you, you will be true to yourself and your work will be unique. No one else can duplicate you exactly. Yes, get to know the work behind color and color theory. Knowledge will be your foundation for creativity. Then throw out your fears and hesitations and just play, explore and have fun!

Tertiary Color Wheel

