

# Color Theory

---



[www.siloma.co.ke](http://www.siloma.co.ke)



**Digital Moran**

Learn. Build. Succeed

# What is Color Theory?

Color theory is a field of study and practical application that explores how colors interact with each other and how they can be used effectively in art, design, and various visual disciplines.

It encompasses the principles and guidelines for understanding color relationships, harmonies, contrasts, and psychological effects. Color theory helps artists, designers, and anyone working with colors to make informed decisions about color palettes, compositions, and visual communication.



# Type of Colors



**Primary Colors:** These are the fundamental colors that cannot be created by mixing other colors. In traditional color theory, the primary colors are red, blue, and yellow.

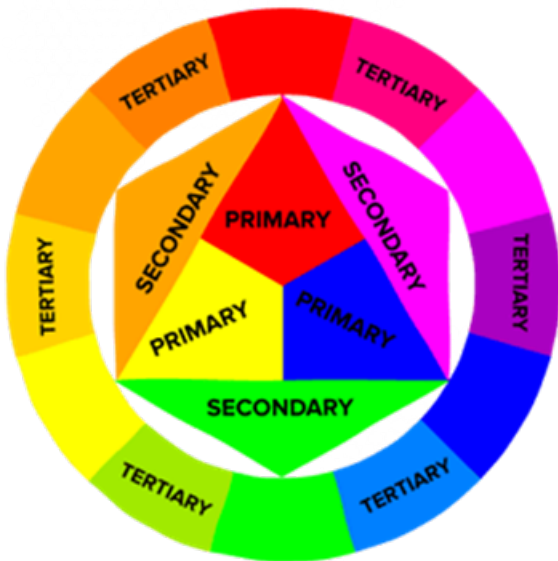
**Secondary Colors:** These are the colors obtained by mixing two primary colors. The secondary colors are green (blue + yellow), orange (red + yellow), and purple (red + blue).

**Tertiary Colors:** Tertiary colors are created by mixing a primary color with a neighboring secondary color on the color wheel. For example, red-orange and blue-green are tertiary colors.



# The Color Wheel

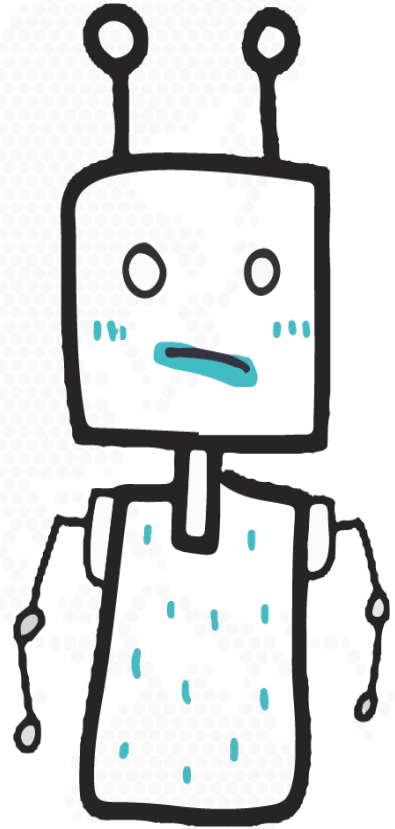
The color wheel is a circular representation of the primary, secondary, and tertiary colors. It serves as a visual tool to understand color relationships and harmonies.



# Color Properties

Hue, saturation, shade, and tint are essential concepts in color theory that describe different aspects of colors. Understanding these color properties allows designers and artists to create a wide range of color variations and effectively manipulate color in their artwork or designs.

1. **Hue:** The pure color itself, such as red, blue, or green.
2. **Saturation:** The intensity or vividness of a color, ranging from fully saturated to desaturated (grayscale).
3. **Shade:** A color that has been darkened by adding black.
4. **Tint:** A color that has been lightened by adding white.





# Color Harmonies

Color harmonies refer to combinations of colors that are aesthetically pleasing when used together. They are based on principles of color theory and can create visually appealing and balanced compositions in various forms of art, design, and everyday life.

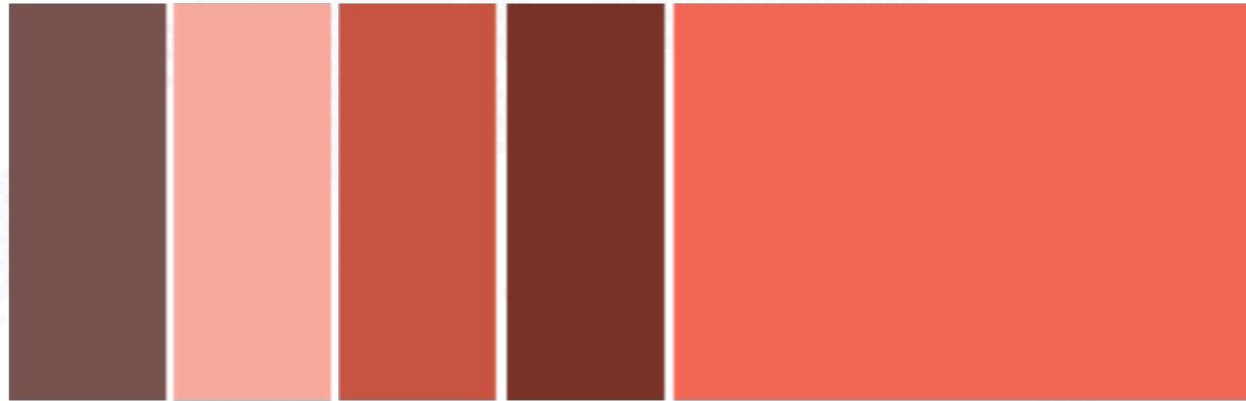
In design and branding, consistent use of harmonious color schemes helps establish a strong and recognizable brand identity. This ensures consistency across various materials and reinforces brand associations in the minds of consumers.

There are various types of color harmonies which include:



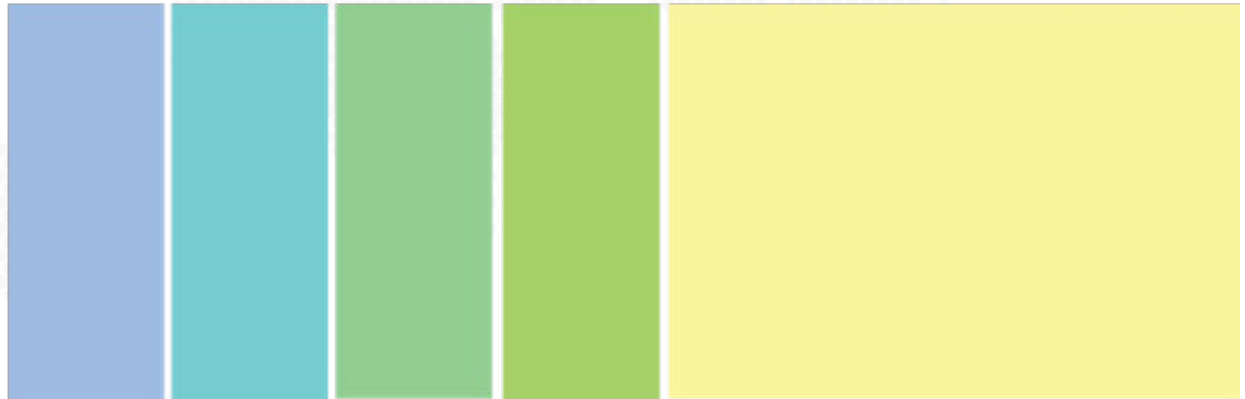
# 1. Monochromatic

Monochromatic colors are different shades, tints, and tones of a single color. This harmony involves using variations of one hue, such as light blue, medium blue, and dark blue. Monochromatic harmonies create a sophisticated and unified look, relying on the subtlety of varying tones.



## 2. Analogous

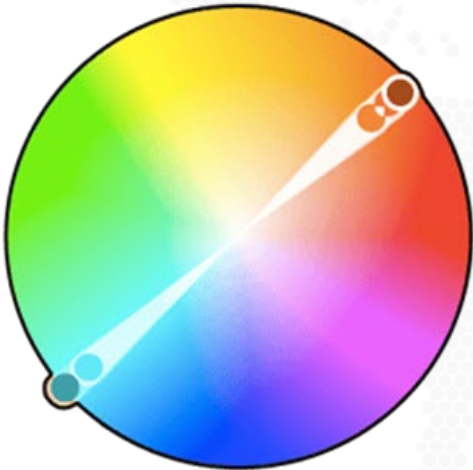
Analogous colors are adjacent to each other on the color wheel. This harmony involves using colors that are closely related, such as red, orange, and yellow or blue, purple, and pink. Analogous harmonies create a sense of harmony and cohesiveness, making them a popular choice for creating a calming and unified color scheme.





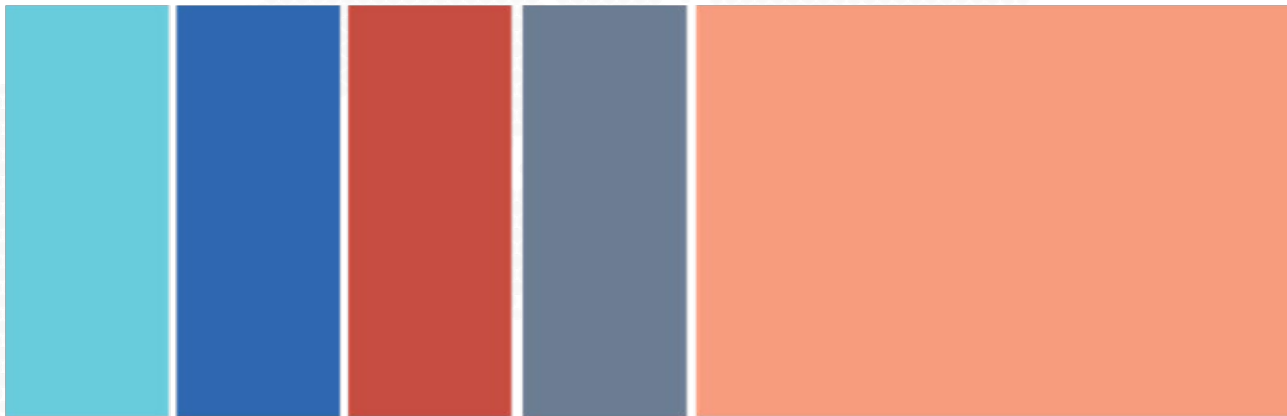
### 3. Complimentary

Complementary colors are located opposite each other on the color wheel. This harmony involves pairing colors like red and green, blue and orange, or yellow and purple. Complementary colors create a vibrant contrast and make each other appear more intense when placed together.



## 4. Split Complimentary

Split-complementary colors are a variation of the complementary harmony. This harmony involves pairing a color with the two colors adjacent to its complement. For example, pairing blue with yellow-orange and red-orange. Split-complementary harmonies provide a balance of contrast and harmony.



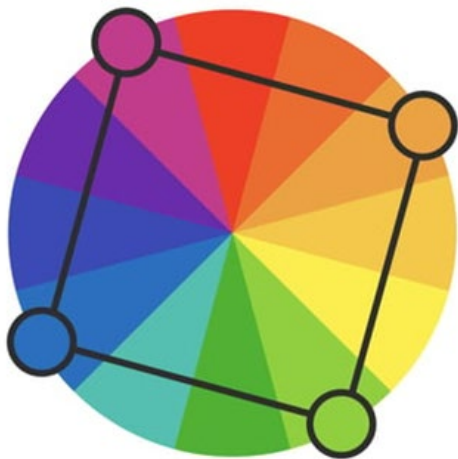
## 5. Triadic

Triadic colors are evenly spaced around the color wheel, forming an equilateral triangle. This harmony involves using three colors that are equally distant from each other, such as red, yellow, and blue or orange, green, and purple. Triadic harmonies create a bold and energetic color scheme while maintaining a balanced visual contrast.



## 6. Tetradic

Tetradic colors consist of two sets of complementary colors, forming a rectangle on the color wheel. This harmony involves using four colors, two pairs of complements, such as blue, green, red, and orange. Tetradic harmonies offer a diverse and dynamic color scheme, but they require careful balance to avoid overwhelming the design.





# Color Models

Color models, also known as color spaces or color systems, are mathematical representations that define how colors are created, displayed, and reproduced in various digital and physical media.

Color models help standardize and communicate color information between devices and applications. Different color models have distinct purposes and are used in specific contexts. Here are some common color models:



# 1. RGB (Red, Green, Blue)

The RGB color model is an additive color model used for digital displays like computer monitors, TVs, and electronic devices. Colors are created by mixing red, green, and blue light at varying intensities. Full intensity of all three colors results in white, while no light produces black. RGB is the primary color model for electronic devices, web design, and digital images.



## 2. CMYK (Cyan, Magenta, Yellow, Key/Black)

The CMYK color model is a subtractive color model primarily used for printing purposes. It's called that because you have to subtract colors to get to white. Colors are created by combining cyan, magenta, yellow, and black inks on a white surface (usually paper). CMYK is used in the printing industry to reproduce colors on paper and other physical materials.





# The Psychology of Color



The psychology of color explores the profound impact that different hues have on human emotions, behaviors, and perceptions. Colors possess inherent psychological associations and cultural significance, evoking specific feelings and eliciting varied responses from individuals.

Marketers, designers, and psychologists alike harness the psychology of color to influence consumer preferences, shape brand identities, and create effective communication strategies.

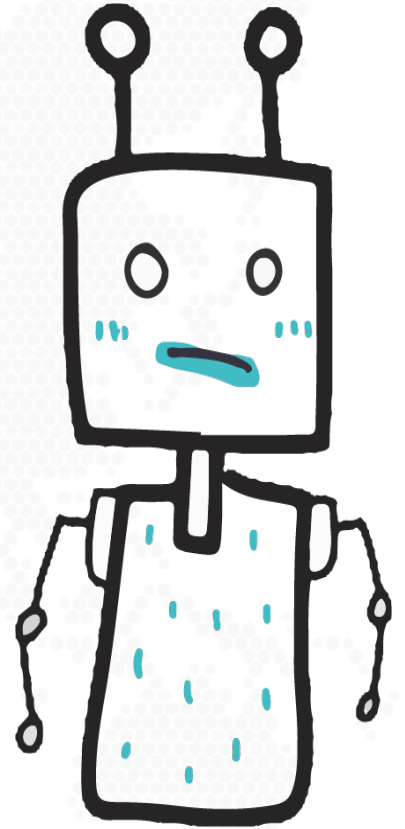




# Colors

Color is extremely important in developing your brand. Colors can determine how your brand is perceived. E.g. Most sophisticated brands have black as their primary color and most children brands have playful colors that evoke excitement and playfulness.

- **Red:** Red is the color of passion and excitement. It's the perfect choice if your brand identity is loud, youthful, and exciting.
- **Orange:** Orange is another high-energy color and is great if you want to appear friendly and playful. It's used less commonly than red, so will also make you stand out.
- **Yellow:** Yellow, the color of sunshine, is all about happiness. The cheerful vibe makes it a good choice if you want to feel fun, accessible and affordable.
- **Green:** An incredibly versatile color, green can be used for just about any brand. Culturally, though, when people see green, they think two things: money or nature. If your brand is tied to either of those things, green is an especially good choice.



# Colors

- **Blue:** The most universally appealing color in the spectrum, blue can help your branding to appear more stable and trustworthy, so if you're looking to appeal to a wide demographic—and get them to trust you in the process—go with blue.
- **Purple:** Purple is the color of royalty, so if you're going for a luxurious feel in your branding, this a safe bet.
- **Pink:** Right or wrong, pink is culturally tied to femininity, so if your brand is targeted towards women, pink should be a definite contender for your brand color. It's also a great color for brands with a soft or luxurious identity.
- **Brown:** Brown is perhaps the least use color in all of branding, but that could actually work to your advantage! Any time you do something different, it helps you stand out. Brown can also help people to view your brand as rugged or masculine.
- **Black:** If you want to be viewed as modern or sophisticated, there's nothing as classic and effective as black.

# THE PSYCHOLOGY OF COLOR

From the natural world to the artifice of technology, our lives are painted in a kaleidoscope of colors, each with the ability to affect our psyche in predictable ways. The psychology of color is a powerful tool in design and branding alike. We've compiled a list of the 12 most commonly used colors along with emotive guidelines for each. Remember, none of these emotional responses are objectively fixed to any given color. When it comes to the psychology of color, context and culture matter.

## RED

### POSITIVE

Power  
Passion  
Energy  
Fearlessness  
Strength  
Excitement

### NEGATIVE

Anger  
Danger  
Warning  
Defiance  
Aggression  
Pain

## ORANGE

### POSITIVE

Courage  
Confidence  
Warmth  
Innovation  
Friendliness  
Energy

### NEGATIVE

Deprivation  
Frustration  
Frivolity  
Immaturity  
Ignorance  
Sluggishness

## YELLOW

### POSITIVE

Optimism  
Warmth  
Happiness  
Creativity  
Intellect  
Extraversion

### NEGATIVE

Irrationality  
Fear  
Caution  
Anxiety  
Frustration  
Cowardice

## GREEN

### POSITIVE

Health  
Hope  
Freshness  
Nature  
Growth  
Prosperity

### NEGATIVE

Boredom  
Stagnation  
Envy  
Blandness  
Enervation  
Sickness

## TURQUOISE

### POSITIVE

Communication  
Clarity  
Calmness  
Inspiration  
Self-expression  
Healing

### NEGATIVE

Boastfulness  
Secrecy  
Unreliability  
Relicence  
Fence-sitting  
Aloofness

## BLUE

### POSITIVE

Trust  
Loyalty  
Dependability  
Logic  
Serenity  
Security

### NEGATIVE

Coldness  
Aloneness  
Emotionless  
Unfriendliness  
Uncaring  
Unappetizing

## PURPLE

### POSITIVE

Wisdom  
Luxury  
Wealth  
Spirituality  
Imaginative  
Sophistication

### NEGATIVE

Introversion  
Decadence  
Suppression  
Inferiority  
Extravagance  
Moodiness

## MAGENTA

### POSITIVE

Imaginative  
Passion  
Transformation  
Creative  
Innovation  
Balance

### NEGATIVE

Outrageousness  
Nonconformity  
Flippancy  
Impulsiveness  
Eccentricity  
Ephemerality

## BROWN

### POSITIVE

Seriousness  
Warmth  
Earthiness  
Reliability  
Support  
Authenticity

### NEGATIVE

Humorlessness  
Heaviness  
Unsophisticated  
Sadness  
Dirtiness  
Conservativeness

## BLACK

### POSITIVE

Sophistication  
Security  
Power  
Elegance  
Authority  
Substance

### NEGATIVE

Oppression  
Coldness  
Menace  
Heaviness  
Evil  
Mourning

## GRAY

### POSITIVE

Timelessness  
Neutrality  
Reliability  
Balance  
Intelligence  
Strength

### NEGATIVE

Unconfident  
Dampness  
Depression  
Hibernation  
Lack of energy  
Blandness

## WHITE

### POSITIVE

Cleanliness  
Clarity  
Purity  
Simplicity  
Sophistication  
Freshness

### NEGATIVE

Sterility  
Coldness  
Unfriendliness  
Elitism  
Isolation  
Emptiness