Introduction to Artistic Design

- Elements and principles of design
- Color theory and application
- Typography and hierarchy
- Design thinking process

Module 1: Introduction to Artistic Design

- Elements of Design: Line, shape, color, texture, space, value, form
- Principles of Design: Balance, contrast, emphasis, hierarchy, pattern, rhythm, unity

Module 2: Color theory and application

Color theory and its application

- Color theory is the study of how humans perceive color and how colors interact with each other. It
 delves into the science of light and color, the psychology of color perception, and the practical
 applications of color in various fields.
- Color theory is like a secret code for understanding colors. It teaches us two things:
 - **How we see colors:** This includes how our eyes and brains work together to make us see all the different colors around us.
 - **How colors work together:** Some colors look good next to each other, while others clash. Color theory helps us pick colors that look great together.

Here are the key aspects of color theory:

1. The Color Wheel:

The color wheel is a fundamental tool in color theory. It is a circular diagram that organizes colors based on their relationships to each other. The most common color wheel includes 12 hues:

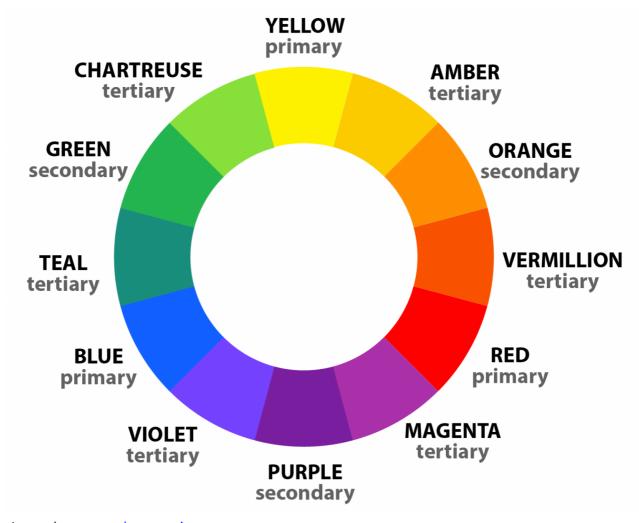
There are two main types of color wheels used in different contexts:

Adobe Color Wheel

1. RYB (Red Yellow Blue) Color Wheel:

This is the traditional color wheel used by artists for mixing paints and pigments. The primary colors are red, yellow, and blue.

Primary colors: Red, yellow, and blue are the primary colors because they cannot be created by mixing
other colors.



. Image by: www.color-meanings.com

- **Secondary colors:** Orange, green, and purple are created by mixing two primary colors in equal proportions. secondary colors are created by mixing any two primary colors. For example, mixing red and yellow creates orange, yellow and blue creates green, and red and blue creates purple.
- **Tertiary colors:** These are created by mixing a primary and a secondary color. There are six tertiary colors: red-orange, yellow-orange, yellow-green, blue-green, blue-violet, and red-violet.

2. RGB (Red Green Blue) Color Wheel:

This color wheel is used for light and digital applications such as TVs, computers, and smartphones. In the RGB model, the primary colors are red, green, and blue, and secondary colors are created by adding light together. For instance, red and green light combined creates yellow light, while blue and green light combined creates cyan light. Mixing all three primary colors of light together creates white light.

Color Wheel Calculator | Canva Colors

Primary, secondary and tertiary colors [2]

There are 12 main colors on the color wheel. In the RGB color wheel, these hues are red, orange, yellow, chartreuse green, green, spring green, cyan, azure, blue, violet, magenta and rose.

The color wheel can be divided into primary, secondary and tertiary colors.

Primary colors in the RGB color wheel are the colors that, added together, create pure white light. These colors are red, green and blue.

In the RYB color wheel, primary colors are colors that can't be mixed from other colors. There are three primary colors: red, yellow, and blue.

Secondary colors are colors that result from mixing two primary colors. There are three secondary colors. In the RGB color wheel, these are cyan, magenta and yellow. When you mix light, red and green make yellow, green and blue make cyan, and blue and red make magenta.

In the RYB color wheel, the secondary colors are purple (red mixed with blue), orange (red mixed with yellow), and green (yellow mixed with blue).

Tertiary colors are colors made by combining a secondary color with a primary color. There are six tertiary colors. In the RGB color wheel these are orange, chartreuse green, spring green, azure, violet and rose.

In the RYB color wheel, the tertiary colors are red-orange, yellow-orange, yellow-green, blue-green, blue-violet, and red-violet.

2. Color Relationships:

Color theory defines different relationships between colors based on their positions on the color wheel:

• **Complementary colors:** These are colors directly opposite each other on the color wheel. They create high contrast and visual interest when used together.



Image by: closetomyheart.com

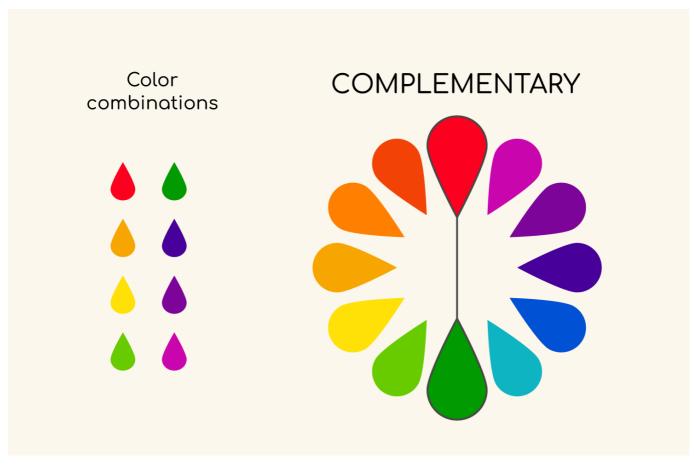


Image by: amadine.com

• **Analogous colors:** These are colors that are next to each other on the color wheel. They create a harmonious and cohesive feeling when used together.

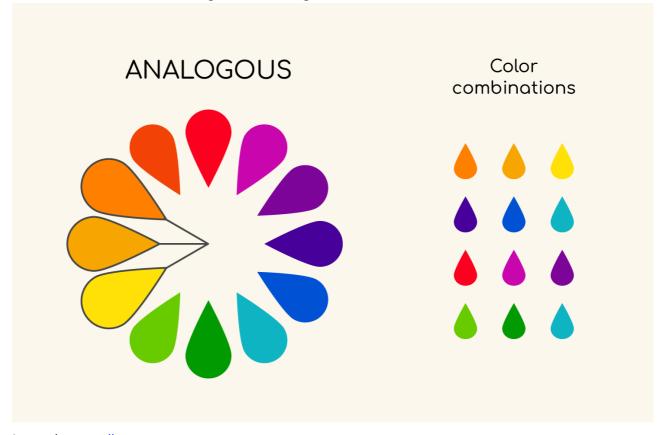


Image by: amadine.com

• **Triadic colors:** These are three colors that are evenly spaced on the color wheel. They create a vibrant and dynamic feel when used together.

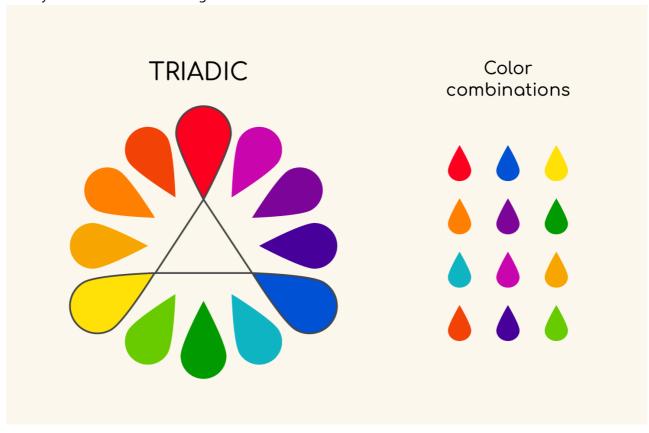


Image by: amadine.com

2. Warm and cool colors:

Warm colors are the colors from red through to yellow. These colors are said to bring to mind warmth, like the sun.

Cool colors are the colors from blue to green and purple. These colors are said to bring to mind coolness, like water. [2]

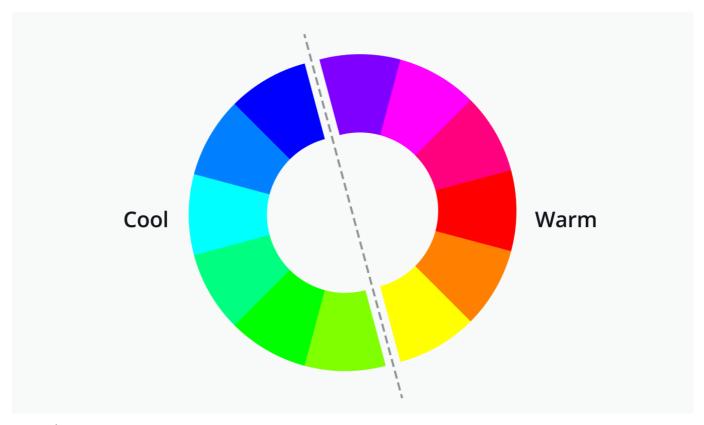


Image by: www.canva.com

3. Shades, Tints and Tones:

You can create shades, tints and tones of a color by adding black, grey and white to a base hue.

Shade A shade is created by adding black to a base hue, darkening the color. This creates a deeper, richer color. Shades can be quite dramatic and can be overpowering.

Tint A tint is created by adding white to a base hue, lightening the color. This can make a color less intense, and is useful when balancing more vivid color combinations.

Tones A tone is created by combining black and white—or grey—with a base hue. Like tints, tones are subtler versions of the original color. Tones are less likely to look pastel, and can reveal complexities not apparent in the base color. [2]

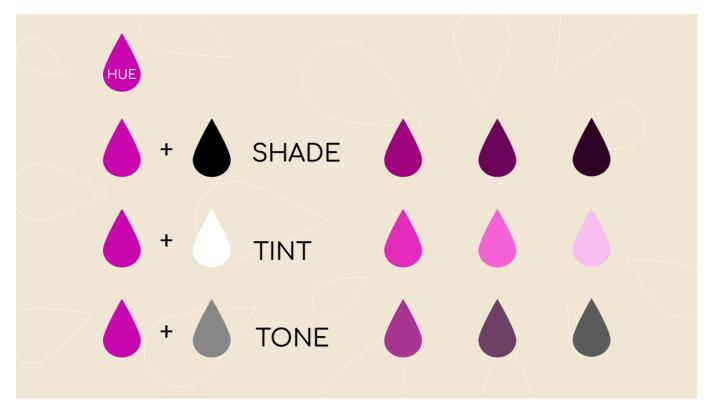


Image by: amadine.com

4. Hue, Saturation and Luminance:

Hue, Saturation, and Luminance (HSL) are three fundamental properties used to describe and manipulate color. They work together to create the vast spectrum of colors we perceive:

1. Hue:

A hue is basically any color on the color wheel. When you are using a color wheel or a color picker, you can adjust the saturation and luminance of a hue. [2]

2. Saturation:

- Refers to the **intensity or purity** of the color.
- A highly saturated color is vibrant and bold, while a less saturated color appears muted or washed out.
- Increasing saturation is like adding more pigment to a color, making it richer and more intense. Decreasing saturation makes it closer to gray.

3. Luminance:

- Represents the **brightness** or **lightness** of the color.
- Increasing luminance makes a color **brighter**, while decreasing luminance makes it **darker**.
- Imagine adding white to a color to make it lighter and black to make it darker.

HSL Calculator | w3schools

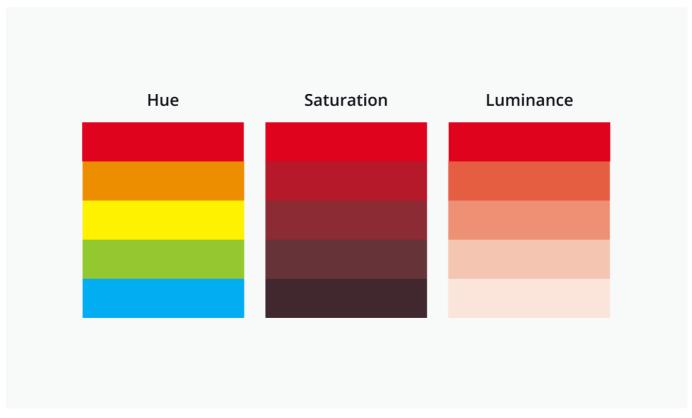


Image by: www.canva.com These three properties are often used in conjunction to represent and manipulate colors in various applications such as:

- Image editing software: Programs like Photoshop and Lightroom use HSL sliders to adjust specific colors within an image.
- **UI and web design:** HSL values can be used to define color schemes for websites and applications.
- **3D graphics and animation:** HSL helps create and control color variations in 3D models and animations.

Understanding HSL is crucial for manipulating and working with colors effectively in various creative and technical fields.

5. Color Psychology:

Colors are not just visual elements; they also evoke emotions and associations. Understanding the psychology of color is crucial for using color effectively in various applications. For example:

- **Red:** Associated with energy, passion, excitement, and danger.
- **Yellow:** Associated with happiness, optimism, creativity, and caution.
- Blue: Associated with peace, trust, reliability, and sadness.
- Green: Associated with nature, growth, harmony, and freshness.

6. Applications of Color Theory:

Color theory is applied in various fields, including:

- **Art and design:** Artists and designers use color theory to create visually appealing and meaningful compositions.
- **Fashion and interior design:** Color choices play a significant role in creating a specific mood and atmosphere in clothing and living spaces.

• **Marketing and advertising:** Businesses use color to influence consumer behavior and brand perception.

• User interface (UI) design: Color plays a crucial role in making interfaces intuitive and user-friendly.

By understanding the principles of color theory, you can make informed decisions about color choices in your own creative endeavors, whether it's painting, designing a website, or choosing clothes.

Key Terms

True/False (Mark T for True and F for False)

Answer Key (True/False):

Multiple Choice (Select the best answer)

Fill in the Blanks

Answer Key (Fill in the Blanks):

Exercises

Review Questions

References and Bibliography

[1] B. Software, "Rules of Color Combination," amadine.com. https://amadine.com/useful-articles/rules-of-color-combination [2] Canva, "Color wheel - color theory and calculator | canva colors," Canva's Design Wiki, 2019. https://www.canva.com/colors/color-wheel/