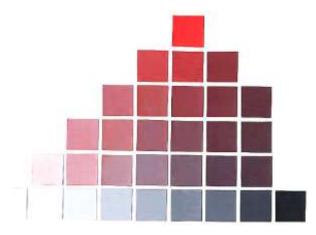
Understanding Hue, Value, and Chroma



Every color has three key traits that help create great combinations for design:

Hue

The name of a color, like red, blue, green, or yellow.

Value

How light or dark a color is (close to white or black).

Chroma

How pure or intense a color is. Adding black, white, or gray lowers its intensity.

Mixing a pure hue with black, white, gray, or any other color reduces its purity and lowers its chroma.



CHROMA - INTENSITY - SATURATION

High Intensity to Low Intensity

When you describe a color as "light blue-gray" or "deep olive green," you already use hue, value, and chroma.

Learning to recognize and describe these traits clearly helps you:

- See subtle differences between colors.
- Pick better color combinations.
- Create balanced and harmonious designs.

Hue vs. Color

Hue: Refers to pure colors from the spectrum (red, yellow, green, blue, etc.).

Color: A broader term that includes all variations of hue, such as shades (hue + black), tints (hue + white), tones (hue + gray), and neutrals (like browns or grays).

In short, hue is the base, and color includes all its modifications!



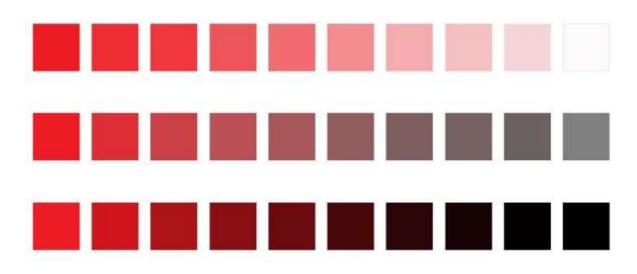
Is Black a Hue? Is White a Hue? What About Gray

Since black, white, and gray are not part of the visual spectrum, they are not hues; however, both color and hue are words commonly used to define all of the colors we see. Don't allow the misuse of the term hue to confuse you. Black, white, and gray are not hues.

In theory, adding white, black, or gray to a hue does not change the color; it only adjusts the value (lightness or darkness).

How White, Black, or Gray Affects a Hue

When white, black, or gray is added to a hue, it doesn't change the color itself; instead, it changes its value—the lightness or darkness of the hue.



Example with Red

Red to White (Tints): Adding white makes red lighter.

Each step toward white increases the value (lightness).

Red to Black (Shades): Adding black makes red darker.

Each step toward black lowers the value (darkness).

Red to Gray (Tones): Adding gray softens red without making it fully light or dark.

Key Observation

- Every square except pure black, white, and gray remains red—it's the value that changes.
- The closer to white, the lighter it looks.
- The closer to black, the darker it looks.

This concept is critical for creating depth and dimension in art and design!

What is the Importance of Value in Painting, Art, and Design?

The contrast of values guides your perception of space, and changes in value give you the ability to see objects as three-dimensional.



It is the change in value that gives you the ability to see objects as three-dimensional. In the illustration above, the circle on the left is a solid color and appears flat. The lighter and darker areas of the circle in the middle give it dimension, and you see it as a sphere.

Value also guides your perception of space. The middle circle looks like it is floating in space. By darkening the color below the shape, the same sphere appears to be sitting on a surface.

These three circles are all flat. It is this change in value that gives an impression of dimension. It is also the change in value that indicates where the object is within its environment





Green Apples, Paul Cezanne, c. 1872-73, oil on canvas, The Art Archive / Alamy Stock Photo

Paul Klee used hue value chroma to create his painting, Crystal Gradation, shown above.



Green Apples, Paul Cezanne, c.1872-73, oil on canvas, The Art Archive / Alamy Stock Photo

Still Life with Green Apples (Paul Cezanne, 1873) is almost completely monochromatic. The apples are painted using greens that range from very pale near white tints to nearly black shades. The background is made up of green-browns.

Subtle contrast is make between all these greens and three strokes of red on one apple. A small amount of yellow is used to add more variety of colour to the bottom left corner and to the apples and their leaves.