INTERMEDIATE COLOR

Color is the result of the presence of an electromagnetic spectrum. We see color, because we see a part of the electromagnetic spectrum called, visible light.

Color appears to our eyes as waves. The frequency at which these waves are emitted is called a wavelength. The eye can only see within a particular wavelength.

These waves are emitted by visible light, by computers screens, light reflecting on paper, and through other mediums.

Color may be affected by the medium. For example, natural light from the sun emulating objects outside can make things appear different from the artificial light of a light bulb. Moreover, the dimming of the sun or the weakness (i.e. watt-age) of a light bulb, may make things appear different as well. More light increases the presence of whiteness in an object. Less light increases the presence of darkness in an object. This light dispersion affects the tint, shade, hue, and luminosity of a color.

Shades are created by adding black. For example, a blue is made Navy Blue by adding black.

Tints are created by adding white. For example, a red is made Pink by adding white.

Tone (or Intensity) may be lowered or heightened by adding some of its complement.

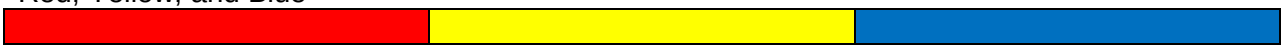
Hue is the color of the object perceived by the eye.

Saturation is the degree of strength or difference from white. It is the extent to which one or two of the three RGB primaries predominates in a color.

Brightness refers to its lightness or luminosity.

PRIMARY COLORS
Different colors are made (on screen and on paper) by combining primary colors with each other to form a secondary color.

Primary Colors (RYB Colors)
Red, Yellow, and Blue



Additive Primary Colors (RGB colors)
Red, Green, and Blue

-Additive Colors combine the inks of Red, Green, and blue. When these colors are mixed, they can produce the light and intensity of any other color.

Subtractive Primary Colors (CMY)
Cyan (blue-green), Magenta (purple-pink), and Yellow

-Subtractive colors combine the inks of cyan, magenta, and yellow to create an image (usually printed).

SECONDARY COLORS
Secondary colors may be combined to form Tertiary colors (or Intermediate Colors).

Secondary Colors
Orange, Green, and Violet.

Tertiary Colors
Yellow-Green, Blue-Green, Blue-Violet, Red Violet, Red Orange, and Yellow-Orange

Some colors are used exclusively for printing, since these colors may be blended on paper to form many more colors than just the primary colors themselves.

CMYK
In color printing, only the subtractive primary colors plus black are used; printers typically use cyan, magenta, yellow, and black.

Many artists use a color wheel to identify secondary colors made from a blend of primary colors. On a color wheel, the color directly opposite of a color is called its complement.

A single color and its shades are considered to be Monochromatic Colors.

Monochromatic colors are made up of tints, shades, and tones of a single color.

PANTONE® is a color system used in web and graphic communication. Many artists, graphic designers, and web designers tend to trust Pantone® colors since they are more easily reproducible for industry.