

**Hue** is the general term for color names whereas pigment names are more specific and may vary slightly from brand to brand. The hue red has a variety of pigment formulations such as alizarin crimson or cadmium red...but recognized as reds...but these are considered paints or pigments and are not generally called hues.

The color wheel usually has 12 hues on the wheel but these are several pigment variations of each hue. Usually the color wheel gives six spectral hues (colors on the spectrum) and six intermediate hues (tertiary colors.) There is a logical sequence or placement of colors on the color wheel establishing relationships that can be helpful for color mixes and color composition.

Prismatic colors are as pure as possible with pigments.

Muted colors have black, white or gray or a color's complementary to a prismatic color. Chromatic hues are called colors.

Chromatic grays have a subtle but discernible hue; they are like muted colors but use a larger content of black, white or gray.

Achromatic hues are referred to as neutrals.

Achromatic grays lack perceptible hue and saturation.

Modified hues can be called neutralized hues.

**Value** indicates the degree of light or dark of a color between the extremes of white or black. Every color has a value range of tints, tones and shades. The values of pure unmixed colors vary greatly. On the color wheel, yellow is the lightest hue and can become white in few more steps. Violet is the darkest hue and can become black in a few steps. Red and green are similar in value and are situated in the middle of the value scale. To mix tints add white, to mix shades add black, to mix tones, add gray. If only a gray scale is represented there is no hue, it is a gradual range of values. Value signifies the relative luminosity of a color. The lighter the color the more light is reflected back to the eye and the more luminous a color is.

**Co-Primaries** From *Colour A workshop for artists and designers* by David Hornung

A color bias is an overtone. Color overtones can make mixing colors from only three primaries unsatisfactory. To overcome this, one can use a base of primaries and co-primaries to mix all other colors. The six base primaries can be crimson/scarlet (red), golden yellow/lemon yellow (yellow), sky blue/ultramarine blue (blue.)

**Saturation** refers to the relative purity of a color. The more a color refers to the clear colors of the prism the more saturated they are. A saturation continuum of all levels of saturation would be created by mixing in infinite degrees any two fully saturated complementaries.

**Gouache colors:** lemon yellow, golden yellow, ultramarine blue deep, sky blue (or Prussian blue), alizarin crimson (or carmine), scarlet, burnt sienna, yellow ochre, and blue-gray (Payne's gray) raw umber. Gouache is very opaque and dries to a matte finish, Winsor Newton Professional Brand is satisfactory or acrylic gouache is good. Lesser brands have less opacity and are difficult to work with.