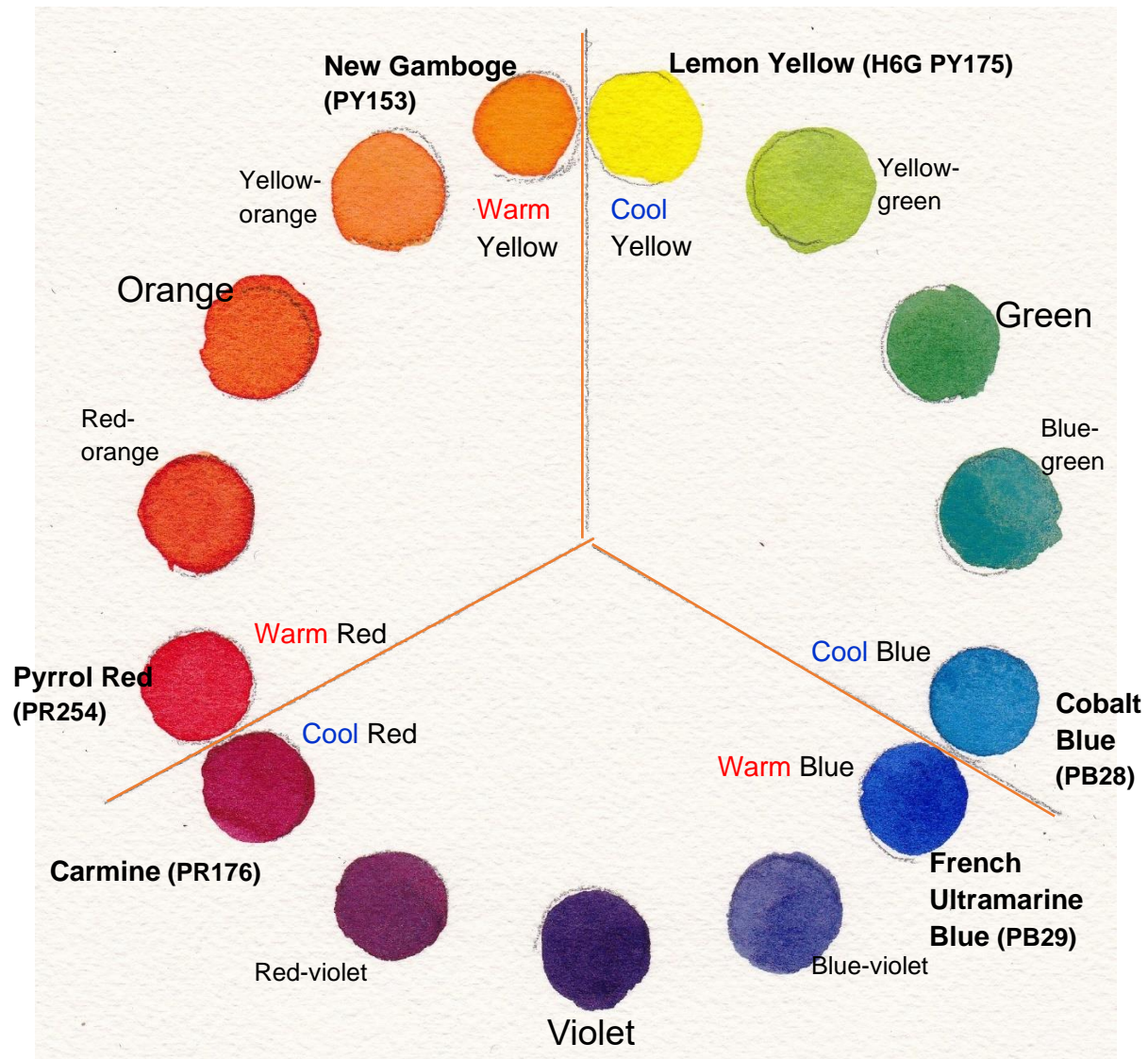


## The Split Primary Color Wheel



Paint color wheels have used primary hues of red, yellow and blue since the development of color printing in the 18<sup>th</sup> century. That system has been replaced by modern printing with different pigments and video systems using wavelengths of light. Video and printer systems use yellow, magenta and cyan as primaries and also use black. Since your computer screen uses a different color-producing system than your painting process, it is hard to reproduce screen hues on watercolor paper. Most watercolor books and teachers still use the traditional wheel.

The traditional wheel is a 12-color wheel featuring *one each* of the primaries red, yellow and blue. At [janhart.com/index.php/freebies/](http://janhart.com/index.php/freebies/) you can find a downloadable copy of Jan Hart's 12-

color wheel. She also gives pigment codes for various paints. These are standardized numbers for the pigment in the paints independent of the name the manufacturer may choose to use.

The wheel described here is a **split primary color wheel** (15-color wheel). It is **split** because one each of the **two primaries** of yellow, red or blue is located on each side of an imaginary line between sectors encompassing 1/3 of the wheel. The warm hues go with the warm color mixing sector of oranges and the cool hues go with the relatively cooler mixing sector of greens. The Violet sector has both a warm and a cool mixer and some artists consider violet a neutral, with a warmer version being red-violet and a cool version being blue-violet. The temperature of a color is always relative to other hues in the painting, on the palette or on the wheel. If you're using Cobalt Blue it is cooler in comparison to Ultramarine, but not cooler than a blue-green, like Ultramarine Turquoise.

*The split primary wheel uses a warm and cool of each of the three primaries to make it easier for learners to mix secondaries that are truer and not muted.* Meaning, for example, you can mix a "truer" orange that is not muted (muddy) or yellow- or red-leaning. Mud in watercolor means you've mixed colors that mute each other (diminished the color strength) to the extent that you've made an unattractive, nondescript, dull color, often some brownish hue.

The split primary wheel is divided into three sections like pie wedges. Each 1/3 of the wheel wedge has a **secondary** color in the middle= **orange, green, or violet**. Between the primaries and secondaries are mixes called tertiaries=**yellow-orange and red-orange; yellow-green and blue-green; and red-violet and blue-violet**. As an artist, thinking of hues you want to mix or describe in color wheel hue terms will help you with color mixing and with using the wheel as a guide. If you're thinking of what you want to mix in terms of the hue's position on the wheel, like yellow-green, then you've already named the hues you need for mixing.

My students are asked to buy 6 primary hues and an additional 4 hues (Daniel Smith brand): Burnt Sienna, Ultramarine Turquoise and Neutral Tint which are all useful for altering your color wheel hues to a variety of additional hues. I also recommend buying a tube of white gouache (pronounced g'wash). Gouache *is* watercolor with white in it which makes it opaque. It comes in many hues and you can mix transparent watercolor with white gouache to create hues. *Do gouache mixing on a separate palette in order not to get it into your transparent paints.*