

# COLOR THEORY

## *Supply List*

**Colors to use** – Can be other medium but preferably oil paint, as oils do not change value when dry vs. wet. Preferably Da Vinci colors, as they are the most vibrant brand across the boards regarding all the following hues:

- Titanium white
- Cadmium Yellow PALE
- Cadmium Yellow Orange, only found with Da Vinci Colors
- Cadmium Red Light
- Alizarin Crimson
- Red Rose Deep
- Ultramarine Blue
- Cerulean Blue
- Viridian Green
- Ivory Black

### **Surface(s)**

Any kind of canvas or canvas panel will work best for this class, unless you are working with water media like gouache or watercolor.

### **Canvas Sizes**

1 – 16” x 20” panels for each week studies. Each week we will be doing 3 studies from the same subject matter, making them too big means making 3 separate pictures, making them too small means not enough room to solve the problems we are tackling

- 1 – 11” x 14” canvas for the color wheel

### **Brushes**

- Bristle brushes if working in oil/acrylics, sables with water media
- Sizes - for color studies and color wheel ½” filberts are best to use <http://www.dickblick.com/products/robert-simmons-signet-brushes/> the link and here is the specific brush code [06647-1005](#)
- 1 drawing brush – round either in sable or bristle between 6 – 8 in most brands.
- As an example of the brush size, here is the link to a Robert Simmons bristle round <http://www.dickblick.com/products/robert-simmons-signet-brushes/> the link and here is the specific brush code 06645-1006.
- 1 palette knife like the RGM #5 [http://www.rgm-art.com/n/en/category/18/classic\\_line.html](http://www.rgm-art.com/n/en/category/18/classic_line.html) click on the hyper link and look up the shape of #5
- Solvent – Gamsol
- Paper towels, rags

## Strings

**What?** A string is a successive run of hues, values, or both that incrementally and gradually change hue, value or both within the few swatches/tiles designed in the string.

**How?** Strings include value to value change, hue to value change, hue to hue change. They are crafted by first examining the extremes that need to be painted and building up a gradation to accommodate those extremes. See examples below.

**Why?** Painters make strings to help them with the illusion of turning form. A big misconception in painting is to blend paint to soften edges and to turn form or generate the illusion of transition/gradation. A string is designed to effectively "turn" form without destroying the freshness of the paint applied to the surface.

**How many tiles are needed?** The number of tiles needed between one extreme and the other is decided by how round the form is, and or how expansive the surface area is. Rounded forms tend to require more transitions to successfully accommodate for all of the subtle changes of direction. In the end, it comes down to how many the artist feels comfortable using in his/her painting.



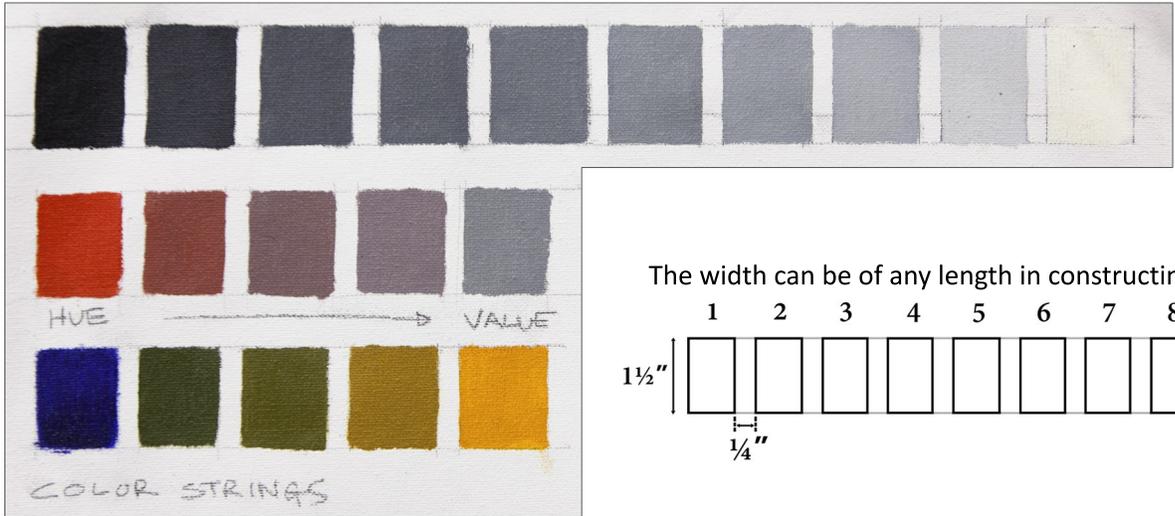
### **Hue Value and Chroma strings**

Top row = value string

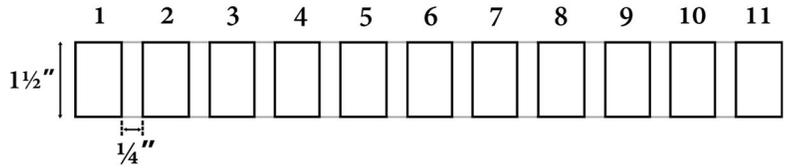
Middle row = value to hue string or chroma string

Bottom row = hue to hue string or color string

Week 1 Reference



The width can be of any length in constructing the Color Strings

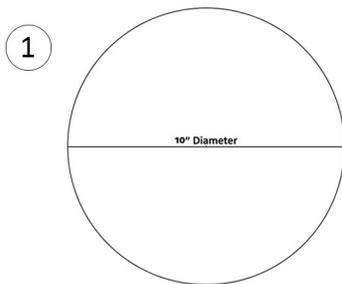


In-class Demonstration

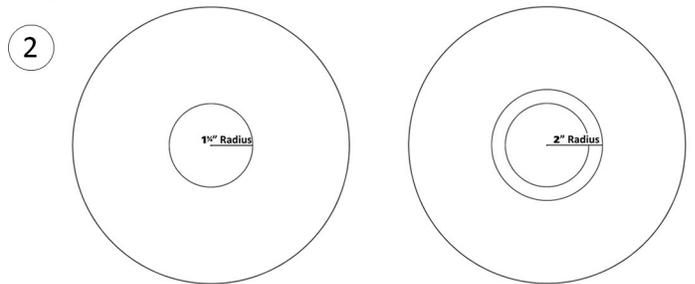


**Materials needed for Color Wheel**

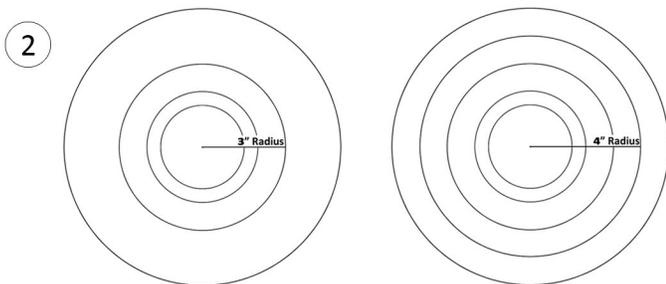
- Canvas board or sheet
- Pencil
- Ruler
- Protractor
- Drawing Compass



Begin constructing the Color Wheel by making a circle with a diameter of 10 inches using a ruler and a drawing compass.

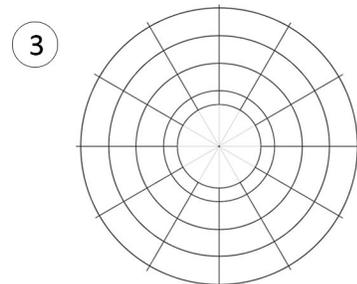


Make 4 circles inside at a radius of 1 3/4 inches, 2 inches,



3 inches

and 4 inches.



Divide the circle into 12 equal spaces. Using a protractor and ruler, mark and draw lines across at a 30° angle from each line.

We will begin with only the colors of the inner ring of the color wheel (high key of chroma). Until this inner ring is done perfectly do not move on to the middle or outer rings (middle and low of chroma). The colors are listed below and how to mix them. Every colorwheel will be different depending on the different contrast between the yellow and the purple. The important part valuewise is that the jumps have to be exactly the same between each neighbor color from the top of the colorwheel to the bottom going down to the right and the left. So with yellow at the top the yellow-orange to the right and the yellow-green to the left should be exactly the same value. The colors should go down on both sides of the wheel with exactly the same interval of contrast all the way to the purple, so that when you squint your eyes, or look at it from a distance it goes as smooth as a rainbow with no color isolated or jumping out.

This colorwheel is not like any store-boughten colorwheel where you are shown a true green. However this colorwheel will be judged also colorwise. So the values must be shared equally around the circle as well as the color relationship. The colorwheel cannot be predominantly red on the right, or green on the left. One color may only be shared within three squares. So the only place yellow will be predominant is at the very top of the wheel and shared primarily with the squares to it's left and right. Going to the right, the orange will be present in the yellow-orange which is next to the yellow and in the next two squares down the right.

These are the paints used to mix the colors first starting from the top to the right and down to the purple at the bottom, opposite the yellow:

Yellow	cadmium yellow pale
Yellow-orange	cadmium yellow pale & cadmium yellow orange
Orange	cadmium yellow pale & cadmium yellow orange
Red-orange	cadmium yellow orange & cadmium red light
Neutral red	cadmium red light & red rose deep*
Red-purple	red rose deep & ultramarine blue*
Purple	red rose deep & ultramarine blue*

Then starting from the top to the left down to the purple at the bottom:

Yellow-green	cadmium yellow pale & viridian green
Green	cadmium yellow pale & viridian green
Green-blue	viridian green & cerulean blue*
Neutral blue	cerulean blue & ultramarine blue*
Blue-purple	ultramarine blue & red rose deep*
Purple	see above

\*White must be used to adjust the value. It may also be used in small quantities in the upper half of the color wheel under certain circumstances. Use the least amount of white you can to obtain the brightest possible colors in the center of the ring (high key of chroma).

To proceed with the low key of chroma and middle key of chroma you will need to add black to your palette. Make a grey scale with some white. Remix the color you want to extend to the middle and outer circle. It may be easier to extend the color out first. For instance extend the yellow all the way out the outer ring. Then you will grey it down with a black and white mixture of equal value. The value of the yellow section should be exactly the same. The only thing that changes is the key of chroma. The inner ring is pure yellow. The middle ring is more grey (less color), but the same value. And the outer ring (low key of chroma) is the most grey without changing the value. There should be a recognizable difference, but not too grey so that you cannot recognize the color from which it is coming.

Color Wheel Reference





Week 5 Reference



Week 6 Reference



Week 7 Reference



Week 8 Reference



Week 9 Reference



Week 10 Reference



Week 2 Demonstration



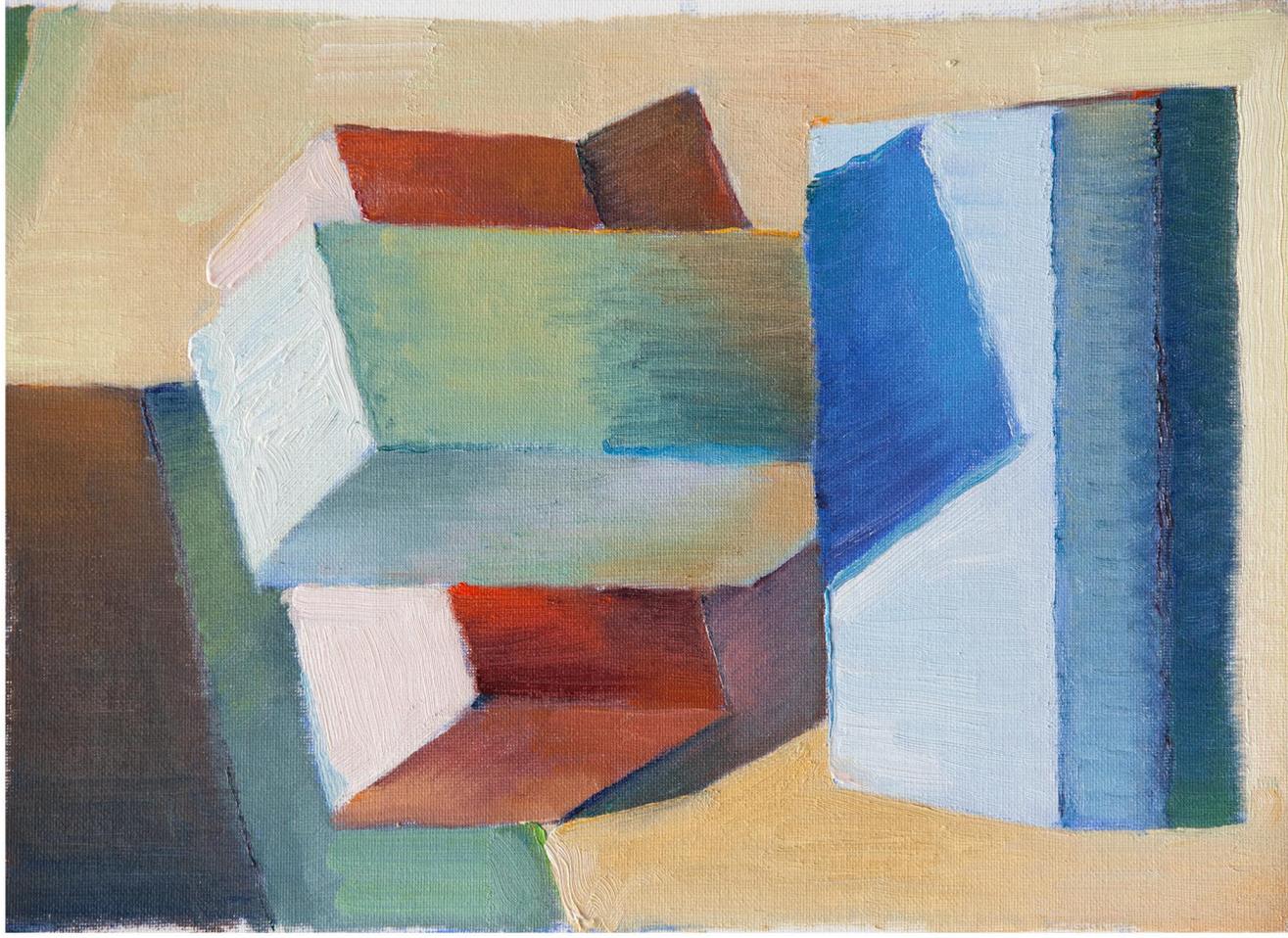
Week 5 Demonstration



Week 6 Demonstration



Week 7 Demonstration



Week 10 Demonstration



Week 8 Demonstration



Week 9  
Demonstration

