Of all the design elements, color is the most fascinating. It attracts attention. It excites emotions. It enriches our lives. Color is a tool you can use when you are designing. An easy way to see how colors work together is to use a color wheel.
Primary and Secondary Hues

There are hundreds of individual colors, but all of them are derived from the three primary hues:

- **Yellow**
- **Red**
- **Blue**

Secondary hues are a combination of the primary hues. Yellow + red = orange; red + blue = violet; and blue + yellow = green.

Each color has all three qualities, hue, value, intensity. For example, the 4-H emblem is green (hue), medium (value), and bright (intensity).

Colors can be warm or cool. The warm hues are the ones seen in the sun or fire: yellow, orange, red. Cool hues—greens and blues—are found in the restful elements of nature, such as the sky, water, and grass.

Your eyes will see three things in each color:
- What color (its hue or name),
- Its lightness or darkness (its value), and
- Its brightness or dullness (its intensity).

### Hue, Value, and Intensity
Colors differ in hue, value, and intensity.

- **Hue** is the name of a color, such as yellow, red, or blue.

- **Value** describes how light or dark a color is. When a color has white added to it, it is a tint and is lighter in value. When a color has black added to it, it is a shade and is darker in value.

- **Intensity** (also called chroma or saturation) is the brightness or dullness of a color. A color as we see it on a color wheel is at full intensity (bright). When we mix it with gray, black, or white, it becomes dull. Colors also lose intensity when mixed with their complement (the opposite color on the wheel). For example, adding a little green to bright red will make the red duller.

### Color Schemes

- **Monochromatic**
  
  Monochromatic color combinations are made up of one hue in different values and intensities. This example uses different values and intensities of red.

- **Complementary**
  
  These schemes are made from hues directly opposite each other on the color wheel, such as yellow and violet. These combinations have the strongest hue contrast.

- **Analogous**
  
  Analogous schemes are three to five hues that are next to each other on the color wheel. These schemes always have one color in common. Red is the common hue in the example shown here (orange, red-orange, and red).

### To learn more

You can learn more about color by experimenting and observing.

1. Try mixing your own paints to create your own color wheel.
2. Trace the outline of shapes in a magazine picture. Color in the shapes, using one of the color schemes.
3. Find 10 colors that really catch your eye. Describe them by hue, value, and intensity.
4. Draw a simple design three times. Color each one using a different color scheme.