piece. That's why we're drawn to the hand-painted skeins in the yarn store. (On page 135, I show you how to make the most of these painted skeins in a project.) Next time you're planning a project, throw in more colors than you're comfortable using, and add a few colors that make you squeamish. It's often those few strands of acid green or tangerine orange that make the piece sing.

The Language of Color

Color is such a visual concept that it's hard to describe in words. How often have you tried to describe a color to a friend (or yarn-store employee) without a sample handy and found yourself saying something like "It was red, but an orangey red, kind of pale and translucent, sort of like the inside of a watermelon, but up near the rind." The good news is that there is a language to describe color. It's no replacement for a visual representation, but it should get you closer to the mark than describing produce.

SEEING VALUE

One of the best ways to see value without the distraction of color is to view the yarn through a piece of red acrylic, often sold at quilting shops under the name Ruby Beholder. If you don't have red plastic, you can get a similar effect by squinting. Another way to achieve this is to use a digital camera set to take black-and-white pictures instead of color.

» **HUE.** This is what we think of when we think of color. It defines whether something is red, blue, green, or yellow. Pure hues are the colors you find in a rainbow and the smallest box of crayons.

» **TONE.** If you mix gray with a pure hue, you get a tone. Steel blue is a tone of blue.

Pure hue   *Mixed with gray*

» **TINT.** If you mix white with a pure hue, you get a tint. Sky blue is a tint of blue.

Pure hue   *Mixed with white*

» **SHADE.** If you mix black with a pure hue, you get a shade. Dark blue is a shade of blue.

Pure hue   *Mixed with black*

» **VALUE.** The color's representation on the gray scale is its value. If you take the color out of the piece, how light or dark is it? Red has a dark value and yellow a light value.
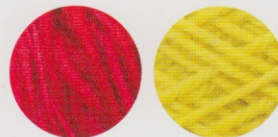
» **INTENSITY.** Intensity refers to the saturation of a color. Rich jewel tones have high intensity.

Color Combinations

Color is often represented as a wheel of pure hues, but if you look at the world, you'll notice most colors aren't on the wheel. Really, color is more like a sphere with the color wheel at the equator and light colors at one pole, dark colors at the other. The interior of the color sphere is filled with innumerable color mixes. Since we can't replicate a sphere on the two-dimensional pages of a book, the color wheel is one traditional way to understand the terminology most people use when talking about color.

» **PRIMARY COLORS.** Primary colors that are used to mix paint, dye, or ink are red, yellow, and blue. All the other colors on the color wheel can be generated from these starting points.

» **SECONDARY COLORS.** Secondary colors are created by mixing together two of the primary colors. The secondary colors are purple, green, and orange.

» **TERTIARY COLORS.** Tertiary colors are created by mixing a primary and a secondary color: red-purple, red-orange, blue-green, yellow-green, yellow-orange, and blue-purple.

» **TRIAD.** Three colors that are evenly spread around the color wheel form a triadic color scheme. Purple, orange, and green form a triadic color scheme. This creates a vivid color palette. One way to tone down a triadic color scheme is to adjust the proportion of colors so that one dominates and the other two are used as accent colors.

» **ANALOGOUS.** Colors that are next to each other on the color wheel form an analogous color scheme. Blue-green, green, and yellow-green form one analogous color scheme. This combination is harmonious and rarely clashes. The downside of analogous color combinations is that their lack of visual tension can make them subdued and low energy.
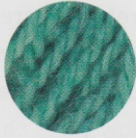
» **COMPLEMENTARY.** Colors on opposite sides of the color wheel, such as red and green, are the complement of each other. This combination creates a lot of visual tension, especially when the colors are used in the pure hue form.

» **SPLIT-COMPLEMENTARY.** Combining a color with the two colors on either side of its complement creates a split-complementary color scheme. This combination has strong visual contrast, but less tension than you have in a straight complementary color scheme. This is one of my favorite color schemes to work with, since it has energy, but not so much as to be overwhelming. Green, red-purple, and red-orange form a split-complementary color scheme.
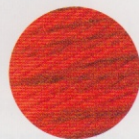
» **TETRADIC (RECTANGLE OR SQUARE).** Two pairs of complementary colors form a tetradic color scheme. If the color pairs are evenly spaced around the color wheel, it's also a square color scheme. One tetradic color scheme is red, green, blue, and orange.
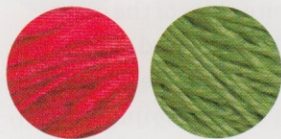
Getting Color Proportions Right

There are many ways to put colors together. The simplest is to use equal amounts of each color in a scheme. Sometimes, however, this can cause too much visual contrast and/or create a too-predictable pattern. To break things up, you can change the proportions, or let one color lead and the others play subordinate roles as accents.

Many factors affect the visual strength of colors: bright colors come forward, dark colors recede. Shiny threads come forward, matte threads recede. (This is because the reflective nature of the shiny threads makes them visually lighter than matte threads.) Thick threads come forward, thin threads recede. You can use these properties to create a color landscape that pleases you.

You know how some colors only work in small doses? Bright yellow, for example, is hard to take in large amounts. Yellow napkins on a table work, whereas a yellow tablecloth can be overwhelming. This property of colors was studied by Johann Wolfgang von Goethe, who developed a system by which he assigned a numerical value to colors to represent their relative strength. You can use his values as a way to balance the colors in a project. For example, if yellow (9) is three times as visually powerful as violet (3), you can use one-third as much yellow to violet in a fabric to make it more visually balanced. Barbara J. Walker, a master weaver, uses this strategy when designing color-and-weave fabrics with yarns colored in pure hues.

Dark and light

Thick and thin

Complementary colors