Glossary

✓ a channel	A channel in the L*a*b color model that contains the colors ranging from magenta to green.
✓ additive model	Adding red, green, and blue wavelengths of light together to form new colors. Also called the RGB system. The additive model is widely used in photography, television, and computer monitors.
✓ adjustment layer	A special type of layer that lets you experiment with color and tonal adjustments to an image without permanently modifying the pixels in the image.
✓ b channel	A channel in the L*a*b color model that contains the colors ranging from yellow to blue.
✓ banding	Parallel stair-step breaks appearing in an image.
✓ Bézier curve	An easy to edit curve produced using an object-oriented graphics program.
✓ bit-mapped image	A computer image made up of discrete pixels. All images created or manipulated in Photoshop are bit-mapped images.
✓ bit depth	The number of grays or colors that each pixel can display.
✓ bleed	Printing that extends to the edge of a sheet after the paper is trimmed. To ensure that the image will reach the edge of the sheet, printers extend the printed image beyond the edge of the final page size into an area known as the trim.
✓ blueline	Generic name for any single color proofing material on which the image appears blue. Commonly used as a synonym for DuPont Dylux.
✓ brightness	The lightness or darkness of a color. “Light blue” refers to the brightness of a blue hue.
✓ calibration	The process of adjusting a computer monitor and Photoshop to compensate for variations in the color, amount and type of ink, kind and color of substrate, and printing process.
✓ canvas	The workspace on which an image in Photoshop resides.
✓ CCD (charged coupled device)	A silicon chip that digitizes light by converting it into magnetic impulses. Used in video cameras, digital cameras, and desktop scanners.
✓ channel	A container Photoshop uses to hold color information. An RGB image has three channels—one each for red, green, and blue—while a CMYK image has four channels—cyan, magenta, yellow, and black.
✓ chroma	The purity of a color. Pure colors are saturated, while desaturated colors have been mixed with gray. Chroma is sometimes called

		saturation.
✓	chromaticity	Measurement of the colors transmitted by a layer, or combination of layers, of ink.
✓	clipped	Areas in a Photoshop image that are either solid white or solid black.
✓	clipping	Ignoring the lightest and darkest pixels in an image when the Auto Levels Command is chosen.
✓	clipping path	A clipping path causes every part of a Photoshop image that is within the clipping path to become transparent when the image is previewed or printed from another application.
✓	CMYK model	A method of printing colored photographs using cyan, magenta, yellow, and black inks. Also called the subtractive model and process-color printing.
✓	color	The hue, saturation, and brightness of colors other than black and white.
✓	color break	Identifying varying colors on a single color proof by indicating lighter colors as a lighter shade on the proof.
✓	color cast	Unwanted color that affects an entire image, or a portion of an image.
✓	Color Key	A brand name for Imation's overlay color proofing system.
✓	color mode	A method used by Photoshop to display, print, and store colors created using various color models.
✓	color model	A method for categorizing and describing the infinite variety of colors that are found in nature. Photoshop uses four color models: RGB, CMYK, HSB, L*a*b, and several spot color systems.
✓	color palette	Preprinted samples of ink colors.
✓	color separation	A technique used to convert an original color image into CMYK. A color separation results in four separate images each containing its individual portion of the photograph's color range.
✓	color wheel	A circlular representation of hues. Red is displayed at 0˚, yellow at 60˚, green at 120˚, cyan at 180˚, blue at 240˚, and magenta at 300˚.
✓	colorimeter	A highly sophisticated imstrument that measures the reflective and transmittive characteristics of ink or other pigments.
✓	compact disk (CD-ROM)	A plastic disk on which digital informaion can be recorded. A CD is read optically.
	complementary colors	Two opposite colors that, when added using additive colors, create white light. Also called opponent colors.
✓	continuous tone	An image that is composed of an infinite number of shades of color or gray.
✓	contrasty photograph	A photograph with a tonal range greater than 1.80.
✓	cropping	Choosing the part of a photograph to scan
✓	degrees Kelvin	A temperature measurement system used to identify the color of a

		given light source.
✓	densitometer	An instrument used to measure optical density.
✓	densitometric value	Numbers used to describe the density of given tones. In printing and publishing applications, densitometric values usually range from 0.00–2.00 with a 0.00 value representing pure white and 2.00 representing a very black area.
✓	density	The relative darkness of a particular tone or color. Also called optical density.
✓	desaturated color	Muted colors created by adding gray to a saturated color.
✓	desktop scanner	A low-end scanner, capable of lower-quality scans, in which the original is usually positioned on a flat sheet of glass similar to a copy machine.
✓	device independent	A color model that produces consistent color ouput regardless of the monitor, computer, or printer used.
✓	dimensionally stable	A material that does not appreciably change size due to changes in temperature or relative humidity.
✓	direct-to-plate	Outputting an image directly to a printing plate without using film.
✓	direct-to-press	Outputting an image directly to a printing press. The plate is either attached to the press or can be an integral part of the press' machinery.
✓	dot gain	A phenomenon that causes halftone dots to print larger than they should.
	downsample	Decreasing image size without increasing resolution. Decreasing image resolution without increasing image size.
	dpi	Dots per linear inch. Used to describe the resolution of laser printers and imagesetters.
✓	drum scanner	A high-end scanner, capable of the highest quality scans, in which the original is wrapped around a rotary scanning drum.
✓	duotone	A two-or-more color reproduction of a single color original.
✓	Dylux	DuPoint trade name for its photopolymer single-color proofing material.
✓	electromagnetic spectrum	A diagram illustrating various types of wave energy in order from the shortest to the longest waves/
✓	external proofing	Proofing done to show the client the content of a job and to obtain approval.
✓	film assembly technician	A technician who assembles films in proper order for printing.
✓	fingerprinting	Conducting a series of tests to determine the largest and smallest dots a particular press can reproduce using a particular substrate and ink. The amount of dot gain inherent in a given process/substrate combination is also measured.
✓	flat photograph	A photograph with a tonal range less than 1.60.

✓	gamma	A numerical value that describes a change in the contrast in a reproduction compared to the original.
✓	gamma ratio	The ratio of the tonal range of an original compared to the tonal range of a reproduction.
✓	gamut	The range of colors a device or process is capable of producing.
✓	global color correction	Making adjustments to the overall color content of an image.
✓	gradient	A gradual transition between two or more shades or colors.
✓	gray component replacement (GCR)	Replacing the gray and black components in CMY images with black ink.
✓	gray levels	The number of shades—from white to black—that exist in a printed photograph. Calculated by adding one to the number of sizes of halftone dots a halftone cell can produce. For example, a 16 × 16 halftone cell can produce 256 sizes of halftone dots. The same cell can produce 257 gray levels—256 sizes of dots plus blank paper.
✓	grid	Intersecting lines, much like graph paper, that appear over a Photoshop canvas to help you position or crop images or accurately draw selections.
✓	guide	User-positioned horizontal or vertical lines that can be used to properly position, crop, or select an image in Photoshop.
✓	halftone cell	A matrix of printer dots that can be combined to produce varying sizes of halftone dots. A 16 × 16 halftone cell matrix can produce 256 different sizes of halftone dots, while an 8 × 8 halftone cell can produce 64 sizes of halftone dots.
✓	halftoning	The process in which an image composed of many shades or colors is broken down into tiny dots of varying size.
✓	high contrast reproduction	A special-effect photograph in which the contrast is increased by reproduction steepening its curve. Also called a line conversion.
✓	highlight density	The lightest point with the lowest densitometric reading in a photograph.
✓	highlights	The lightest areas of a photograph.
✓	HSB model	A color model used primarily by artists. Colors are defined in terms of hue, saturation, and brightness.
✓	hue	The name of a color.
✓	image resolution	The number of pixels in each unit length of measurement. Usually measured in pixels per inch (ppi).
✓	internal proofing	Proofing done for in-house use by technicians and supervisors to check a job's contents.
✓	knockout	Removing an image from under type so that the color(s) of the image does not interfere with the color of the type.
✓	Kodak Photo CD	Digitzed images encoded by a scanning device onto a compact disk.

✓	L*a*b model	A color model, used primarily by color scientists, to define colors in terms of lightness, an “a” channel value, and a “b” channel value. L*a*b, abbreviated Lab in Photoshop, is the color model used by Photoshop to convert a color image from one mode to another.
✓	laser (proof)	A hard copy of a digital file printed on a laser printer that is used as a proof.
✓	layer mask	A special type of mask in Photoshop that allows you apply special effects to an image on a layer without actually affecting the pixels. If the resulting effect is what you want, you can apply it to the layer.
✓	lightness	In the L*a*b model, lightness is the lightness or darkness of a color.
✓	line art	Drawings that are reproduced with only one solid color of ink.
✓	line conversion	A special-effect photograph in which the contrast is increased by steepening its curve. Also called a high contrast reproduction.
✓	lines per inch	The number of rows of halftones dots in one linear inch. Also known as lpi, screen frequency and screen ruling.
✓	local color correction	Adjusting the CMYK color components of specific colors and/or areas in a photograph.
✓	lookup table	A table that contains the data necessary to convert a pixel's Photoshop RGB Tone Values to CMYK halftone dot values.
✓	lossless	A compressed file that is not damaged or deteriorated when it is compressed or decompressed.
✓	lossy	A compressed file that is deteriorated when it is compressed by removing some specific data regarding the color of each individual pixel.
✓	lpi	Lines per inch. The number of rows of halftones dots in one linear inch. Also known as screen frequency and screen ruling.
	luminance	The lightness of darkness of a color.
✓	mid-range scanner	A scanner that utilizes some of the attributes of a high-end drum scanner but costs far less.
✓	midtones	The gray areas of a photograph.
✓	misregister	Misalignment of tthe printed sheet during printing that causes the image to appear in the wrong place.
✓	moiré	An undesirable pattern caused by overprinted halftone screens that are not angled 30˚ apart.
✓	monitor resolution	The number of pixels per inch that a monitor can display. Most monitors in common use have monitor resolutions between 40 ppi and 90 ppi.
✓	object oriented	An image composed using mathematical formulas rather than discrete pixels. Draw programs, such as Adobe Illustrator and Macromedia Freehand create object-oriented images.
✓	on-demand printing	Reproducing the exact number of copies of a document you need when you need them.

✓	opponent colors	Two opposite colors that, when added using additive colors, create white light. Also called complementary colors.
✓	optical density	The relative darkness of a particular tone or color. Also called density.
✓	phantom halftone	A halftone that uses only small dots to create a very light effect. Phantom halftones are often used as backgrounds for type or illustrations.
✓	photo-mechanical proof	A proof made from the same films that will be used to make the printing plate.
✓	photomultipler tube	A highly sensitive photocell that transforms variations in light into electric currents. Used in high-end color scanners to create signals that are input to a computer.
✓	pixel	Picture element: a tiny spot of color recorded by a scanner.
	PostScript	Brand name for a page description language used in laser printers and imagesetters.
✓	ppi (pixels per inch)	Measurement system used to describe image resolution and monitor resolution.
✓	preflighting	Checking a digital files for defects before a job is entered into the printing production sequence.
✓	press check	An event at which the customer examines the first few printed sheets before authorizing full production to commence.
✓	primary colors	The dominant colors in the visible spectrum—red, green, and blue.
✓	printing plate	A sheet of paper, plastic, rubber, fabric, or a variety of metals that collects the appropriate color ink from the press' inking system and transfers it to the substrate.
✓	process color printing	Overlapping layers of cyan, magenta, and yellow ink to create new colors. Each layer of ink subtracts light from the white paper on which it is printed. Also called the subtractive model and the CMYK model.
✓	process colors	Cyan, magenta, and yellow. Process colors are secondary colors of light—that is, they have been formed by mixing equal parts of two of the primary colors of light. Cyan is composed of green and blue; magenta is composed of red and blue; and yellow is composed of red and green.
✓	quadtone	A four-color reproduction of a single color original.
✓	resample	Changing the number of pixels in an image. Resampling an image to a smaller size is an acceptable practice. Resampling an image to a larger size may cause unacceptable results.
✓	RGB model	Adding red, green, and blue wavelengths of light together to form new colors. Also called the additive model. The RGB model is widely used in photography, television, and computer monitors.
✓	saturated color	Bright, pure colors that have not been dulled by the addition of gray.
✓	saturation	The purity of a color. Pure colors are saturated, while desaturated colors have been mixed with gray. Saturation is sometimes called

		chroma..
✓	scan resolution	The number of pixels per linear inch (ppi).
✓	screen frequency	The number of rows of halftone dots in a linear inch. Also known as lines per inch (lpi) and screen ruling.
✓	screen ruling	The number of rows of halftone dots in a linear inch. Also known as lines per inch (lpi) and screen frequency.
✓	secondary colors	Colors created by mixing equal amounts of two primary colors. Secondary colors include cyan, magenta, and yellow.
✓	separation	A print-out of an individual channel.
✓	shade	A dark color, created by mixing black with a hue. A shade is a measure of a color's brightness.
✓	shadow density	The darkest point with the highest densitometric reading in a photograph.
✓	shadows	The darkest areas of a photograph.
✓	soft proof	An image that appears on a computer screen.
✓	spectrophotometer	A highly sophisticated imstrument that measures the reflective and transmittive characteristics of ink or other pigments.
✓	specular highlight	An abnormally white area in a photograph, such as a reflection of a flash. Specular highlights are often printed without halftone dots.
✓	spot color	A single color of ink applied to portions of a printed sheet.
✓	stock photos	Commercially available photographs.
✓	substrate	The material on which an image is printed. Substrates include paper, plastic, metal, cardboard, glass and other materials.
✓	subtractive model	Overlapping layers of cyan, magenta, and yellow ink to create new colors. Each layer of ink subtracts light from the white paper on which it is printed. Also called process color printing and the CMYK model.
✓	SWOP	Specifications for Web Offset Publications. SWOP standard inks are used by most U.S. publications printers as well as many other printers.
✓	three-point color correction	Adjusting the color density of the highlights, midtones, and shadows.
✓	tint	A light color, created by mixing white with a hue. A tint is a measure of a color's brightness.
✓	tonal range	The range of tones—from dark to light—that an image possesses.
✓	tone	The lightness or darkness of areas within a black and white photograph
✓	tone correction	The process of making photographs appear more pleasing by lightening or darkening particular tones.
✓	tone targeting	The process of compensating for changes in a printed image's appearance that are caused by the inherent attributes of printing processes.

✓	total ink limit	The total coverage of CMYK inks that a press can handle. An image that is composed of 25C25M25Y50K has 125% coverage. Most presses cannot handle more than 340% total ink coverage.
✓	trapping	Altering the size of an image to prevent slivers of a white knockout from appearing next to a printed image, even if the paper misregisters during printing.
✓	tristimulus value	The amount of red, green, and blue a particular point on a photograph reflects.
✓	tritone	A three-color reproduction of a single color original.
✓	undercolor addition (UCA)	Replacing some of the colored ink removed by GCR in only the shadow areas of a reproduction. This technique makes black areas appear blacker.
✓	undercolor removal (UCR)	Essentially the same as gray component replacement except that UCR affects only those areas that are black or gray in the original image.
	upsample	Increasing image resolution without a corresponding decrease in image size. Increasing image size without a corresponding decrease in image resolution.
✓	visible spectrum	That portion of the electromagnetic spectrum that can be seen by humans.