

## Some digital terms.

**ActiveX Control:** A simple, authenticated program that runs in your browser.

**Anti-Aliasing:** Smoothing out stair-stepping (jagged lines or "jaggies") in a photo by softening the transition of color between background pixels and edge pixels. The more advanced image editors offer this feature.

**Archive:** To back up files or photos for storage. Digital photos are often archived on CDs or tape.

**Artifact:** The added, and undesirable, changes made to a photo. Typically, these changes are caused by the digital camera or the way the digital camera encodes the picture (see JPEG).

**Aspect Ratio:** The relative horizontal and vertical sizes of an image. If a photo has an aspect ratio of 2:1, it means that the width is twice as large as the height.

**AWB(Automatic White Balance):** A setting in digital cameras that attempts to determine and adjust for the light conditions in which the camera is operating. (See: White Balance)

**Backprinting:** The text that appears on the back of your photo print.

**Bandwidth:** The amount of data that can be transmitted between two points in a fixed amount of time.

**Bitmap (BMP):** A type of image file format, bitmap refers to the rows and columns of dots that make up a photo image. Each dot is stored in at least one bit of data.

**Brightness:** Each pixel's lightness value between black and white.

**Buffer:** A storage area in computer memory that temporarily holds data for manipulation before transfer to another device.

**Burst images:** A series of images taken in rapid succession, captured at a preset speed. Burst images are usually used to capture a person or object in motion. The number of images captured will vary, depending on how long the shutter button is held down and how much memory is available.

**Calibration:** The proper alignment of equipment to a standard measure to create reliable output.

**CCD-Charged Coupled Device:** A light-sensitive chip used to capture images in digital cameras, video cameras, and other devices. In digital cameras, the CCD is what converts light into electrical current, which is then translated into your digital image.

**Collection:** A group of images you have uploaded and stored on the web.

**Compact Flash:** A storage card found in digital cameras that allows easy transfer of images to your computer, generally used in conjunction with a USB or PCMCIA Card adapter.

**Compression:** Storing data in a format that reduces the file size. Some compression methods sacrifice image quality (in the form of artifacts) for smaller file sizes.(see Artifacts)

**Contrast:** Contrast is the difference between the brightest bright and the darkest dark in a picture. Too much contrast will cause a loss of delicate shadings and shadows. Too little contrast leaves the photo muddy.

**Default setting:** A preset value or setting automatically selected by a program or device if a substitute is not selected.

**Digital Camera:** A filmless camera that captures pictures in an electronic format; the pictures can be easily transferred to a computer.

**Digital Zoom:** The apparent magnification of an image by a digital camera. This results in fewer pixels for the image, and thus lower image quality compared to an optical zoom. (See: Optical Zoom)

**Digitization:** For images, the process of taking an analog (i.e. physical) image and turning it into a digital file.

**Dithering:** A method of creating an intermediate color by placing two similar colors side-by-side.

**Download:** The transfer of data from one computer to another or to a peripheral device such as a printer. You generally "download from" and "upload to. (See: Upload)

**DPI (Dots Per Inch):** A way to measure the resolution of a printed image by the density of dots. The higher the resolution, the more dots per inch are in the image.

**Drag and Drop:** Dragging a file from one place to another in order to

trigger an action.

**Driver:** A software program that tells the computer how to interact with a peripheral device such as a printer or scanner.

**File Format:** A method of encoding information into a file. Graphics or image files can be saved in many formats, including GIF, TIFF and JPEG.

**Filters (Optical):** Various glass or acetate covers placed on a camera lens that create special effects on the final image.

**Filters (Software):** A software module that manipulates an image, either to imitate the effect of an optical filter or to sharpen, soften or otherwise transform it.

**FTP (File Transfer Protocol):** The main protocol for sending files through the Internet.

**Flashcard:** A commonly used type of memory card for cameras, a flashcard stores the images as they are taken by the camera.

CompactFlash and SmartMedia are the two most commonly used types.

**Flash memory:** A special kind of memory chip that can be erased and programmed, and retains information after the system has shut down. Flash memory in digital cameras allows them to retain images even after the batteries die.

**GIF File Format (Graphic Interchange Format):** (Pronounced "Jiff" or "Giff") A graphics file format that allows data compression and image files to be exchanged across multiple platforms, GIFs are widely used on the Web to display indexed-color graphics and images, but are inappropriate for photographs.

**Gray Level:** (See: Brightness)

**Hue:** The name of the color, such as red, green or yellow. Hue can be measured as a location on a color wheel, and expressed in degrees.

**Image Processing:** The process of capturing, importing, manipulating

and outputting digital images.

Image Resolution: (See: Resolution)

**JPEG Compression(Jay-peg):** An acronym for Joint Photographic Experts Group, JPEG is a compression technique for color images. Known as a "lossy" compression technique, JPEG compression discards some data to make file sizes smaller. This can result in artifacts in the final image. (See: Artifacts)

**LCD (Liquid Crystal Display):** The picture display built into the digital camera.

**Lossless compression:** Refers to data compression that does not introduce artifacts and lower image quality. However, lossless compression isn't very efficient. If image quality needs to be extremely high, a lossless compression format such as TIFF would be used despite the large file size.

**Lossy compression:** Refers to data compression that discards unneeded data. Often used for image files, it results in some degeneration of image quality, but also results in a smaller file size.

**Megapixel:** A measurement of image quality equaling one million pixels. A higher pixel count equals a higher image resolution and better quality of image. Examples: 1 megapixel= 1152x872, 1.3 megapixel = 1280x1024. "Megapixel camera" usually refers to digital cameras that have at least one million pixel resolution.

**Metadata:** Data about data, such as information about how and when a set of data is collected, how the data is formatted, and so on.

Meta data is the information about your image, including an image ID number, assigned when you upload an image, size and aspect ratio of the image, and any changes you make, such as captions, rotations, etc.

**Noise:** Unintentional and undesirable changes in an image added in the course of scanning.

**Optical Zoom:** Optical zoom uses lenses to increase or decrease the magnification of the image being captured. An image taken using optical zoom has as high a resolution as the camera allows. Digital zoom, on the other hand, results in lower resolution. (See: Digital Zoom)

**PCMCIA:** An acronym for Personal Computer Memory Card International Association. A PCMCIA card adapter can be used with a memory card such as CompactFlash or Smartmedia to easily transfer images from your camera to your computer.

**PhotoCD:** A compact disc offered by Kodak to professional photographers that stores high-resolution images scanned by Kodak.

**PICT:** A file format used with Macintosh applications and computers that can contain both bit-mapped and object-oriented images. PICT II is the current standard and supports 32-bit color (more than 16 million colors).

**Picture CD:** A Kodak product and service, this is a CD-ROM of scanned photos made from 35mm or APS (ADVANTIX®) film. The CD includes the image of each photograph in varying levels of resolution and file size, as well as image editing software.

**Picture Disk:** A floppy diskette that can accompany negatives and prints developed from a traditional camera, and can be used with the computer and software to manipulate and print photos.

**Pixel:** A single dot in a digital image or computer display monitor. The more pixels in an image, the higher the resolution. (See: Resolution)

**Plugin:** A small addition to a software program, such as a browser, that either enables tasks not otherwise available, or enhances a specific type of functionality in the browser. Other examples of plug-ins used by Web browsers are Macromedia's Flash or Shockwave, and RealNetworks RealPlayer.

**Red-Eye:** The red discoloration of photo subjects' eyes, caused by the light of the flash bouncing off the retina in the back of the eye.

**Resize:** To change the horizontal and/or vertical dimensions of an

image.

**Resolution(or image resolution):** A measurement of the number of pixels that make up an image. The higher the number of pixels in an image, the higher the resolution, and the larger the file size.

Sometimes resolution is expressed in a total number of pixels, such as a "megapixel camera", and sometimes resolution is expressed as dimensions of an image, such as 1600x1200. A higher resolution image will create higher quality enlargements.

**RGB:** Short for Red, Green and Blue, the three primary colors for devices that use light to display images, such as monitors.

**Rotate:** When your pictures from Shutterfly are displayed on your computer, you may want to change the orientation of a particular picture by rotating it in 90 degree increments to the right.

**Saturation:** The amount of color present in an image or part of an image.

**Scanner:** An electrical device that convert photographs, slides or negatives into digital form to be manipulated and stored on computers.

**Serial connection:** A serial connection allows peripherals such as digital cameras to easily transfer data to the computer via a serial cable. This method of transferring images is slower than using a CompactFlash or Smartmedia card with a PCMCIA Card adapter.

**Sharing:** Allowing other people to view your photos on the Web.

**Smoothing:** A technique used to make curves smoother in an image by averaging pixels with their neighbors.

**Thumbnail:** Miniature, scaled version of an image that is used for reference, as on the Shutterfly Web site or on a camera's LCD screen.

**TWAIN:** An open industry interface used to transfer images from a digital camera to a computer via a serial connection.

**Upload:** To move files or images from your computer to a server.  
(SeeDownload)

**USB:** An acronym for Universal Serial Bus, an interface that provides a simpler way to attach digital cameras etc. for recognition by the

computer. USB ports offer 10 times the speed of a serial cable connection.

**White Balance:** Adjustment that makes the brightest object in an image appear white. This is accomplished by varying of the relative brightness of the red, green and blue components. Some digital cameras can be set to Automatic to make the white balance decision, or they may have settings like "Daylight", "Bright Sun" and so on, so you can set the camera to make the necessary correction. (See:AWB)