Term Explanation

Ambient light The natural light in a scene.

Aperture A small, circular opening inside the lens that can change in diameter to control the amount of light reaching the camera's sensor as a picture is taken. The aperture diameter is expressed in f-stops; the lower the number, the larger the aperture. For instance, the aperture opening when set to f/2.8 is larger than at f/8. The aperture and shutter speed together control the total amount of light reaching the sensor. A larger aperture passes more light through to the sensor. Many cameras have an aperture priority mode that allows you to adjust the aperture to your own liking. See also shutter speed.

Find a volunteer, a flashlight, and a partially darkened room. Look closely into the eye of your volunteer. Examine the size of the person's pupil (the black, center portion of the eye). Now, while still looking at the eye, shine the flashlight towards the person's eye. The pupil will become dramatically smaller as the iris closes to let less light into the eye. This is how the aperture of a camera works.

Back-lighting - light directed at the subject from behind the subject. This often causes the subject to be underexposed unless spot metering or exposure compensation is used.

Burning/vignette: Selectively darkening part of a photo with an image editing program.

Burst Mode - Many digital cameras have some type of burst mode to take a series of photos in quick succession. The capability or performance will vary. This is also sometimes referred to as the continuous mode or drive mode.

CCD Standing for charged coupled device, this refers to the chip used to record image information. Light hits the CCD when a photo is taken, and then the analog CCD converts the information to digital. This is one of the two main recording devices used in digital cameras.

CMOS The CMOS image sensors enable the integration of all required camera circuits onto the same chip, making them well suited for tiny cameras such as in PDAs and cellphones. Initially used in less expensive devices, the quality of CMOS sensors has improved steadily, and they have been incorporated into professional cameras.

CMYK Cyan, Magenta, Yellow, Black. The four colors in the inksets of many photo-quality printers. Some printers use six ink colors to achieve smoother, more

photographic prints. The two additional colors are often lighter shades of cyan and magenta.

Contrast The difference between the darkest and lightest areas in a photo. The greater the difference, the higher the contrast.

Crop To trim the edges of an image, often to improve the composition.

Depth of Field A photograph that shows the area close to the camera and things far away all in good focus is said to have a large depth of field. A narrow depth of field is when only a thin section of the scene in the picture is in focus and the rest out of focus the further away it gets from the in focus part.

Dodging Selectively lightening part of a photo with an image editing program.

Download, downloading – The process of moving computer data from one location to another. Though the term is normally used to describe the transfer, or downloading, of data from the Internet, it is also used to describe the transfer of photos from a camera memory card to the computer. Example: I downloaded photos to my PC.

DPI Dots per inch: A measurement of the resolution of a digital photo or digital device, including digital cameras and printers. The higher the number, the greater the resolution.

EXIF Exchangeable Image File: the file format used by most digital cameras. For example, when a typical camera is set to record a JPEG, it's actually recording an EXIF file that uses JPEG compression to compress the photo data within the file.

Exposure The intensity of light multiplied by the length of time it falls on a light-sensitive material; specifically, the combination of shutter speed and aperture.

External flash A supplementary flash unit that connects to the camera with a cable, or is triggered by the light from the camera's internal flash.

Fill flash A flash technique used to brighten deep shadow areas, typically outdoors on sunny days. Some digital cameras include a fill flash mode that forces the flash to fire, even in bright light.

F-Stop The f-stop of a lens is a number that represents the aperture opening. A large opening is a small f number, and a small opening is a large f stop. Lenses are rated in the range of f-stop numbers they can be set to. Pay particular attention to

the lowest number. If a lens is rated, "f3 to f22," the f-3 is what you care about. This represents the lens' ability to pass light. The smaller the number the more light the lens can admit which improves the camera's ability to capture images in places with low light. Some of the best 35mm film cameras have lenses that are rated at around f1.2 and f1.8. In digital cameras you will do well to get a lens in the area of f2.8.

Grayscale A photo made up of varying tones of black and white. Grayscale is synonymous with black and white.

Histogram A graphic representation of the range of tones from dark to light in a photo. Some digital cameras include a histogram feature that enables a precise check on the exposure of the photo.

Image resolution The number of pixels in a digital photo is commonly referred to as its image resolution.

ISO speed A rating of a film's sensitivity to light. Though digital cameras don't use film, they have adopted the same rating system for describing the sensitivity of the camera's imaging sensor. Digital cameras often include a control for adjusting the ISO speed; some will adjust it automatically depending on the lighting conditions, adjusting it upwards as the available light dims. Generally, as ISO speed climbs, image quality drops.

Macro Macro focus is the ability of the camera to focus on objects close to the camera- closer than about 12". When used in conjunction with a zoom lens, macro can allow the photographer to fill the viewfinder with small objects- with some cameras, a dime can nearly fill the frame. This is useful with flowers, insects, and other such small items. Some cameras have a different macro distance for the wide angle setting and the telephoto setting.

Megapixel A unit equal to one million pixels. The higher the resolution, the more pixels in an image and therefore the greater the image quality. An image file that is 1 megapixel (MP) can make a photo realistic print of 5 x 7 inches; a 2 MP file can make an 8 x 10-inch print; a 3 MP file can make an 11 x 14-inch print.

Panning A photography technique in which the camera follows a moving subject. Done correctly, the subject is sharp and clear, while the background is blurred, giving a sense of motion to the photo.

Pixel Picture Element: digital photographs are comprised of thousands or millions of them; they are the building blocks of a digital photo.

Raw The RAW image format is the data as it comes directly off the CCD, with no in-camera processing is performed.

Red-eye The red glow from a subject's eyes caused by light from a flash reflecting off the blood vessels behind the retina in the eye. The effect is most common when light levels are low, outdoor at night, or indoor in a dimly-lit room.

Saturation How rich the colors are in a photo.

Sensitivity See ISO speed.

Sharpness The clarity of detail in a photo.

Shutter A mechanism that opens and closes to admit light into a camera for a measured length of time.

Shutter speed The camera's shutter speed is a measurement of how long its shutter remains open as the picture is taken. The slower the shutter speed, the longer the exposure time. When the shutter speed is set to 1/125 or simply 125, this means that the shutter will be open for exactly 1/125th of one second. The shutter speed and aperture together control the total amount of light reaching the sensor. See also aperture.

Single-Lens Reflex A camera in which the image formed by the taking lens is reflected by a mirror onto a ground-glass screen for viewing. The mirror swings out of the way just before exposure; to let the image (or light) reach the film. Abbreviated SLR.

White balance A function on the camera to compensate for different colors of light being emitted by different light sources.