

fiberPhoto Vocabulary Words - Chemistry and Darkroom Terms**Photo Vocabulary Words - Camera and Film Terms****Photo Vocabulary Words - Composition and Film Terms****Computer Vocabulary Words, Pt 1: Hardware and Main Screen Terms****Computer Vocabulary Words, Pt 2: Text and Miscellaneous Terms****Computer Vocabulary Words, Pt 3: Software and Manipulation Terms****Digital Photography Terms****Videography Terms****Photography Words, Pt. 1: Chemistry and Darkroom Terms**

1. **Darkroom** - light-tight room
2. **Safelight** - an enclosed darkroom lamp to which the photo paper in use is NOT sensitive [[How Safe is a Safe Light?](#)]
3. **Photosensitive** - material which is chemically or physically **changed by** the action of **light** [See [pictures](#) being printed under the yellow safelight.]
4. **Exposure** - the **length** of time that light of a given **intensity** is allowed to act on a sensitive emulsion [Exposure is relevant in both the darkroom and the camera. **In the darkroom**, how long you expose your paper will determine how dark the print is. So, if you want a print to be lighter, you would decrease the time. **In the camera**, exposure can make the difference between objects appearing blurry or sharp. Basic cameras are designed to give you a basic exposure automatically. Advanced cameras let you take over the exposure. Today, even cell phones allow you to adjust the exposure with simple exposure compensation controls to make your pictures darker or brighter when you take the pictures. Some digital cameras even let you adjust the exposure of the image on the computer LONG after the picture was taken.]
5. **Enlarger** - optical projector forming an image of a negative on larger sheet of sensitive paper
6. **Lamphouse** - part of enlarger which contains the light source
7. **Negative holder** - device designed to hold the negative in proper position in the enlarger
8. **Easel** - device used to keep sensitive paper flat while enlarging
9. **Contact proofer** - frame designed to hold the negative in contact with paper for making contact prints
10. **Contact** - print made by placing negative in contact with sensitive paper while exposure is made
11. **Enlargement** - print made from a smaller negative through a projection process
12. **Gray scale** - scale having a graduated series of tones from white to black
13. **Emulsion** - light sensitive coating on film or paper
14. **Resin** - coating plastic coating applied to both sides of paper
15. **Glossy** - shiny
16. **Matte** - not shiny
17. **Latitude** - amount by which a negative (or sensor in the case of digital) may be over or under exposed without much loss of image quality. Another way to look at this is the flexibility to get a good picture even if the subject is over or under exposed. Film usually has a latitude of 2 stops. Digital has a much smaller range of acceptable exposure...IOW, digital has LESS latitude than film...especially for overexposed pictures. With film, it is better to overexpose slightly. With digital, it is better to underexpose than it is to overexpose to make sure that white areas do not blow out completely.
18. **Over developed** - the result of permitting film or paper to remain in the developer too long
19. **Under developed** - the result of not permitting film or paper to remain in developer long enough. A common mistake is to assume that a print received too little light...when in fact...it may have just not been in the develop long enough enough. You can usually spot the difference in that an underdeveloped print will be unevenly developed...and generally lack contrast. You may see swirls in the dark areas.
20. **Reticulation** - cracking or distorting of the emulsion during processing
21. **Stain** - discolored areas on film or paper
22. **Graininess** - a mottled effect in the negative
23. **Burning** - in adding light to certain parts of the image by extra exposure while the rest of the image is protected from the enlarger light
24. **Dodging** - shading a portion of the negative during printing to reduce exposure
25. **Toning** - changing the color of a black and white photographic print
26. **Variable contrast** - system of paper and filters allowing changes in contrast
27. **Highlights** - parts of the pictures having the greater amount of light
28. **Developer** - chemical solution used to convert the latent (invisible) image on film into a visible one
29. **Stop** - bath an acid rinse
30. **Fixer** - chemical solution used to remove unexposed silver salts from developed negatives and prints
31. **Wetting** - agent chemical solution which reduces surface tension of water
32. **Agitation** - movement of material or solution to obtain the continual change of solution at the surface of the material being processed
33. **Fog** - dark, hazy deposit on all or part of the film or paper [IOW, emulsion that has been exposed to light, radiation or heat turning the silver prematurely.]
34. **Thin** - transparent, as in the film due to underexposure
35. **Dense** - very dark, as in the film due to overexposure

Photography Words, Pt. 2: Camera and Film Terms

1. **Camera** - photographic instrument for taking pictures
2. **Simple camera** - camera with few or no adjustments
3. **Lens** - disc (s) of optical glass used to form an image of a subject on a sensitive material [The enlarger uses a lens just like a camera. Lenses come in many different types. Think of a pair of glasses to see better or differently. Just like you can wear a different pair of glasses, you can use different lenses to see a scene different. Some are single focal lengths such as a 50mm lens. Others lenses will vary from Wide Angle to Telephoto. (see definitions below for each type of lens)]
4. **Resolving power** - the ability of a lens to separate closely spaced details in an object
5. **Focal length** - distance from the optical center of a lens to the film plane [In layman's terms, this is how long your lens is. But, you can't just measure the outside of the lens because manufacturers can do some pretty funny stuff with the optics to modify the effective FL. Generally, a 50mm lens for a 35mm camera is equal to your eye. Many digital cameras will state two different focal length ranges. One is the actual

measurement of the lens, the other is in 35mm terms...the standard by which all lenses are compared. Lens come in MANY focal lengths, and most also come in variable focal lengths called a Zoom Lens.

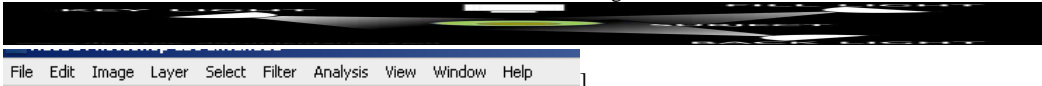
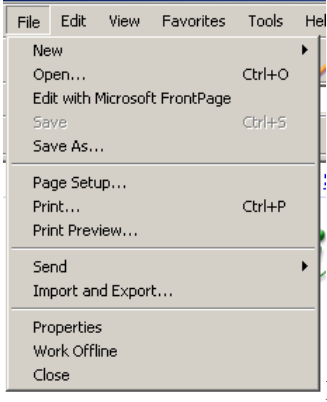
6. **Normal** - type of lens that makes the image in a photograph appear in a perspective similar to that of the original scene
7. **Macro** - type of lens used for close-ups
8. **Telephoto** - type of lens that makes a subject appear larger on the film than does a normal lens at the same camera-to-subject distance
9. **Wide-angle** - type of lens that includes more subject area than a normal
10. **Zoom** - type of lens in which the focal length can be adjusted over a wide range [This is the most ideal type of lens to have, but, the convenience of a zoom does come with a price...quality. Cheap zoom lens will distort colors and have low image quality. In order for a manufacture to bend the light back into shape after passing through all of the pieced of glass found in a lens, it has to employ some pretty expensive design strategies and special fluoride coatings and very expensive glass to correct the light aberrations. So, don't get to excited with that all in one 18mm-300mm zoom lens. Just because you can carry almost every possible focal length possible in one lens, you will pay a price. Here is a page that talks more about this.]
11. **Shutter** - mechanical device which regulates the time light is allowed to act on photographic film [In the darkroom, this is like the timer that regulates how long the light will be allowed to act on the photo paper. In the camera, the shutter is controlled by the camera and is called the "Shutter Speed". This can be either electronically (inexpensive camera) or mechanically with an actual curtain or shutter blades opening and closing.]
12. **Aperture** - opening of a lens, its size controlled by means of a diaphragm
13. **Iris** - lens control used to vary its aperture
14. **Depth of field** - points nearest and farthest from the camera that are exceptionally sharp
15. **Exposure meter** - device which measures the quantity of light reflected from or onto a subject [Just about all cameras have an exposure meter built into the camera...even a cell phone. The exposure meter is what is going to determine if a scene is rendered light or dark. Many modern cameras have very fancy Scene Modes which are simply Exposure Scene Biases that affect how a camera will render any given scene. Despite these advances, it is frequently necessary to adjust the exposure with an exposure compensation setting of +1 or 2 or -1 or 2 or more.]
16. **F/number** - the designation for a relative aperture of a lens
17. **Bellows** - folding portion in some cameras which connects the lens to the camera body
18. **Focal plane** - position in the camera where the film is
19. **Ground glass** - a screen at the back or top of a camera on which the image is focused
20. **Lens hood** - shade to keep stray light from the lens surface [These are sometimes built into the lens, or they are removable. Lens hoods do more then protect the lens from light...as they also help protect from running into things and from fingers from touching the lens.]
21. **Lens paper** - fine, soft tissue paper used for cleaning lenses [Never clean your lens with your shirt. Clothes, even if freshly out of the laundry, have particles, like Talc, that will scratch a lens. Special lintless tissues should be used to clean your lens. I will help clean any lens here in this class. But, if you are on your own, one thing you can do is blow any loose particles off, then exhale heavily to put a little moisture on the lens. The use the the softest thing you can find to wipe off the moisture.]
22. **Cassette** - metal or plastic film spool container [This is what contains your film that gets loaded into the cameras.]
23. **Tripod** - three-legged supporting stand used to hold the camera
24. **Cable Release** - flexible encased wire used to trip the shutter
25. **ISO** - camera rating indicating relative sensitivity to light. The LOWER the number, the LESS sensitive to light. The HIGHER the number...the more sensitive to light. [Familiar numbers will include 50, 80, 100, 200, 400, 800, 1600, 3200. Until recently, the best ISO digital cameras could achieve was 800 with out excessive noise or grain. Recently, camera manufactures have pressed the ISO capabilities of camera now capable of shooting VERY effectively at 6400 ISO...and even higher (such as 25,000) although with pretty excessive noise. What does this mean? The ability to shoot pictures in complete darkness, handheld, with good results. In the days of film, even 400 was not very good. Toward the end of the film era, film manufactures started making significant improvements in film. But just at that time, digital started to emerge. Today, film is pretty good.]
26. **Latent image** - image recorded by light remaining invisible until developed
27. **Load** - insert film into camera or tank
28. **Negative** - photographic image in which the amount of silver present is more or less proportional to the quantity of light reflected from the original subject [IOW, a negative is the opposite of the scene you photograph. Today, with digital cameras, negatives have been replaced with a sensor. The cameras are essentially the same, except there is a fancy senor sitting exactly where the film use to sit. The sensor is technically a positive...which means the image is recorded as correct to the actual light in the scene.]
29. **Focus** - to adjust the distance between the lens and the film for maximum image sharpness
30. **Infinity** - distance which light appears to reach the lens in parallel rays
31. **Flash** - a brief, intense burst of light


Photography Words, Pt. 3: Composition and Miscellaneous Terms

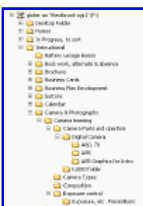
1. **Background** - part of a scene that appears behind the principal subject
2. **Foreground** - part of the scene nearest the camera
3. **Contrast** - difference between tones in a scene
4. **Camera** - angle point of view in which the subject is photographed
5. **Crop** - to eliminate unwanted portion to improve the composition of the photograph [There are MANY times to crop. You should CROP the best you can in the camera. You can then crop in the darkroom or computer. Then, once an images has printed, it can be cropped by cutting the picture down to size. This is known as the three (3) Cs of composition. Crop, Crop, Crop!]
6. **Parallax** - difference in the fields of view of two lenses aimed parallel to each other
7. **Perspective** - relative size and alignment of objects
8. **Time exposure** - a comparatively long exposure made in terms of seconds or minutes, used primarily in night photography
9. **High Key** - print having a majority of its tones light gray or white
10. **Low Key** - print having a majority of its tones dark gray to black
11. **Front lighting** - light shining on the subject from the direction of the camera
12. **Candid** - unposed picture
13. **Composition** - arrangement of the subject matter in a photograph
14. **Double exposure** - two exposures on the same negative or image
15. **Filter** - a piece of colored glass or plastic

16. **Filter factor** - the number of times exposure must be increased to compensate for light absorbed by a filter
17. **Panchromatic** - sensitive to all colors
18. **Panning** - moving the camera so that the image of a moving object remains in the same relative position in viewfinder as the picture is taken. [We will actually do this as a class assignment in class. But you can try this long before then...as it is an easy to do trick that can help improve an otherwise static, boring picture...especially one with a busy background. All you have to do is have a slow shutter. Sometimes you can force a slow shutter by intentionally keeping the ISO down low and/or turning off the flash. Then, when you get ready to take the picture...start tracking the subject. While moving the camera with the subject...press the shutter release. You may not get it at first...but keep trying and you will get some neat results.]
19. **Distortion** - incorrect rendering of subject shape
20. **Flat** - lacking in contrast
21. **Opaque** - not capable of transmitting light
22. **Refraction** - bending of a ray of light in its passage between optical media of different densities
23. **Over exposure** - the result of too much light being permitted to act on a sensitive material
24. **Under exposure** - the result of insufficient light being allowed to pass through a lens to produce all the tones of an image
25. **Halation** - fog or halo around brilliantly lighted objects. A similar affect is called Chromatic Aberration. These effects are caused when you shoot a subject that is strongly back lit. All lenses can have this problem...but cheap lenses (or cameras with built in lenses) can increase the affect Halation and Chromatic Aberration. Read more about [lenses](#).
26. **Art work** - retouching, lettering, and drawing which may be added to a photograph to improve it
27. **Dry mounting** - mounting photographs by means of adhesive tissue, pressure, and/or heat. [We use this method here in this class to prepare your prints for display. The propose of dry mounting is to assist in displaying your photo by keeping the print flat...especially in Southeast Texas where a print will warp from the humidity. Even an 8x10 picture in a frame will warp if it is not mounted. The pictures all along the top of the wall in the class here have been mounted. Mounting of pictures is important in class for displaying at the end of year contest.]
28. **Graduate** - container for liquids marked off to measure various volumes
29. **Fahrenheit** - American temperature scale
30. **Film** - a thin, transparent base coated with a light sensitive emulsion
31. **Slide** - photographic transparency
32. **Print** - positive image on opaque material
33. **Halftone** - a printed image in which shades of gray are represented with a regularly spaced array of different sizes of black dots. [This is the technique used by newspapers to print photo realistic pictures. The opposite of a halftone is called "continuous tone" and is similar to what you get from a picture printed in the darkroom or a real photo printer at the commercial stores (note...this is NOT what you get from an inkjet)].

Computer Vocabulary Words, Pt 1: Hardware and Main Screen Terms

1. Start menu the menu on the far left in the Start bar
 2. [menu bar](#) the horizontal area across the top of the screen of *a specific application* containing menu titles. The [Start Bar](#) is a Windows XP specific menu bar that is used to monitor open applications. [Menus in the menu bar can be accessed through shortcuts involving the [Alt key](#) and the mnemonic letter that appears underlined in the menu title. NOTE: Microsoft has redefined the LOOK of the menu bar and is now calling it a Ribbon]
- 
3. menu a list of commands that appears when you point to and press the menu title in the [menu bar](#) [
 
 4. desk accessories mini applications that are available regardless of the application being used currently [This includes programs like Calculator, Character Map, Paint, etc.]
 5. Printers and Faxes a start menu item that lets you configure your system to print on any printer for which there's a printing resource on the current startup disk
 6. Control panel a desk accessory that is used to select computer features such as volume
 7. Scrapbook a desk accessory in which is saved frequently used pictures and text
 8. Clipboard the holding place for what you last cut or copied
 9. [desktop](#) the computer's working environment; the menu bar and background area of the screen
 10. Finder an application that's always available on the desktop; it is used to manage documents and applications and to get information to and from disks
 11. Read Me documents documents that are included on application and system software disks that provide late-breaking information about the product
 12. folder a holder of documents, applications, or folders on the desktop [See nesting below to sort your folders inside of other folders.]

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Screen shot of nesting (click on it).

1. graphics	information presented in the form of pictures or images
2. reverse	a term used to describe an image in which dark and light elements have been interchanged
3. camera-ready	ready for offset reproduction with no modification
4. EPSF	a file format used to transfer complete high-quality images to a suitable page layout or drawing program and for preparing images for later typesetting
5. bitmap	an image formed by a matrix of visible or invisible dots
6. text	information presented in the form of readable characters
7. font	a collection of letters, numbers, punctuation marks, and other typographical symbols with a consistent appearance
8. style	a stylistic variation of a font, such as italic, underline, shadow, or outline
9. slant	the effect by which objects are made to lean either to left or right
10. proportionally spaced	said of fonts whose characters occupy different amounts of horizontal space, depending on their size
11. serif	a little hook, line, or blob added as decoration onto the basic form of a character [An interesting look at Serif vs. Sans Serif in a product logo: http://www.mcwade.com/DesignTalk/ This should bring up a discussion about the logo change for pepsi]
12. sans serif	said of a font that has no serifs
13. special character	member of a font not necessarily available from the keyboard
14. baseline	the non-printing line on which the bases of capital and lower case letters rest
15. ascender	the part of a lower case character which extends above the x-height
16. descender	the part of a lower case character which extends below the baseline
17. point	a typesetting measure to 1/72 of an inch
18. pica	a typesetting measure equal to 1/6 of an inch
19. dpi	dots per inch
20. resolution	a degree of fineness of image reproduction measured in dots per inch

21. leading	the amount of space from one line of type to the next; usually measured in points
22. kerning	the process of removing the space between characters so they are more closely spaced
23. pixel	picture elements that are the square dots which make up the image on the screen
24. alignment	the arrangement of type and other graphics to lie along one vertical or horizontal line
25. grid	a matrix of visible lines and invisible intermediate lines which can be used for arranging or aligning objects
26. crash	a noun and verb which mean that you system has suddenly stopped working, or is working wrong; you normally have to restart
27. template	an image which can be imported around which can be created text and graphic images
28. telecommunications	transferring information between computers over communication lines
29. desktop publishing	a system that provides you with the ability to produce publication-quality documents
30. bulletin board	a computer dedicated to maintaining a list of messages and making them available over the internet
31. Paper Weight	a reference to the overall heft or density of 1 piece of paper by referring to the weight of 4-5 reams of that paper (500 sheets/ream)
32. save	to store information on a disk
33. crop marks	lines printed with an image to show the dimensions to which finished pages should be trimmed
34. fill	the color or tint applied to the interior of a character form
35. disk	a magnetic medium on which the computer stores information

Computer Vocabulary Words, Pt 3: Software and Manipulation Terms

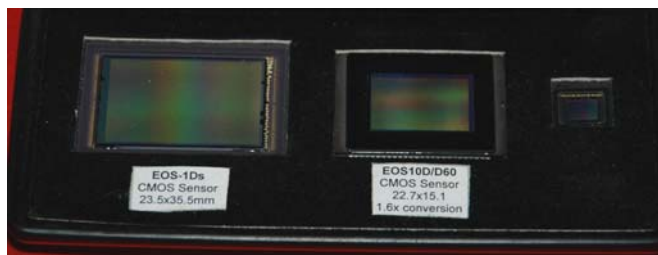
1. landscape view	a page format in which the long edge is horizontal
2. portrait view	a page format in which the long side is vertical
3. copy	to duplicate something from a document and place the duplicate on the clipboard
4. cut	to remove something by selecting it, choosing the appropriate edit command, and sending it to the clipboard
5. paste	to put a copy of the content of the clipboard at the insertion point
6. lock	to prevent documents from being edited, discarded, or renamed, or to prevent entire disks from being altered
7. marquee	a means of selecting one or more objects by dragging a rectangle to enclose them
8. mouse	the small device rolled around on a flat surface next to the computer
9. pointer	what moves on the screen when you move the mouse
10. click	to position the pointer on something, then press and quickly release the mouse button
11. double-click	to position the pointer where you want an action to take place, and then press and release the mouse button twice in quick succession without moving the mouse
12. Shift-click	technique that lets you extend or shorten a selection by holding down the shift key while you select or deselect something related to the current selection
13. drag	to position the pointer on something, press and hold the mouse button, move the mouse and release the mouse button
14. handle	a movable point on an object used to alter its shape or proportions
15. flip	a manipulation of an image in which it appears to be rotated about a horizontal line
16. scale	to adjust the proportions of an object
17. scroll	to move a document or directory in its window to see a different part
18. scroll arrow	an arrow on either end of a scroll bar
19. insertion point	the spot in a document where something will be added
20. control key	a key used to give an alternate interpretation to another key typed, i.e. Ctrl + S will execute the Save Command.
21. Backspace (PC) or Delete (Mac)	a key that moves the insertion point backward, removing the previously typed character, or that removes the current selection. This key is in the main text section, right corner...and on a Windows PC keyboard is usually labeled as "Backspace". On a Mac, the key is labeled as "Delete".
22. Delete (PC) or Del (Mac)	a key that moves the insertion point forward, removing the character to the right of the insertion point, or that removes the current selection, aka forward destructive. The key is located above the arrow keys. On a PC, it is usually labeled as "Delete" and on a Mac it is usually "Del".
23. enter key	a key that confirms or terminates an entry or sometimes a command...aka "Return Key" on a older Mac/Apple Keyboard.
24. software	programs or instructions for the computer to carry out
25. startup disk	a disk that contains the system files the computer needs to get itself started
26. public domain	said of products you have the right to copy, use, give away and sell, without having to pay any money for the right
27. application program	a tool to manipulate information
28. backup	a copy of a disk or of a file
29. initialize	to prepare a blank disk to receive information by organizing its surface into tracks and sectors
30. destination	a disk or folder that receives a copied or translated file
31. default	an assumed or standard setting for something which can vary
32. path name	all the folders a file is in starting from the largest (most distant) to the smallest
33. local area network	a group of computers linked physically by a network of cables
34. fiber optic	a glass or plastic fiber designed to guide light along its length [by confining as much light as possible in a propagating form, a much great amount of data can be carried much further than copper. http://www.arcelect.com/fibercable.htm http://en.wikipedia.org/wiki/Optical_fiber]

Digital Photography Terms

1. **2-stage Shutter Release:** A 2-stage shutter release is the industry standard among current electronic cameras. In order to activate the Autofocus mechanism and the light meter, slightly press the shutter release. [Holding the release halfway maintains the focusing point and the exposure parameters (AE Lock), and allows for re-composition of the picture, if so desired. To take the picture, simply push down on

shutter release all the way.]

2. **A-D Converter:** The A-D Converter converts the analog signal that is emitted from the image sensor into a digital signal.
3. **Aperture:** The lens opening, which permits light to expose the CCD on a digital camera or film (in a traditional camera). The aperture size is either fixed or adjustable, and is calibrated in F-Stop numbers; the larger the number, the smaller the lens opening.
4. **Autofocus TTL (through-the-lens):** Allows the camera to automatically focus through the lens, rather than by moving the lens back and forth manually. Write out the definition for TTL also [#46 below].
5. **Bit:** A bit, which stands for binary digit, is the smallest unit of digital information. Eight bits equals one byte. Digital images are often described by the number of bits used to represent each pixel. i.e. a 1-bit image is monochrome; an 8-bit image supports 256 colors or grayscales; while 24 or 32-bit supports true color.
6. **CCD:** Charge-coupled device. The image sensor that separates the spectrum of color into red, green and blue for digital processing by the camera. [In digital cameras both Area and Linear CCDs are used. A CCD captures only black-and-white images. The image is passed through red, green and blue filters in order to capture color. **Area CCD:** A square or rectangular CCD that can capture an entire image at once, which is essential for dynamic subjects and flash photography. **Linear CCD:** a.k.a. scanner-type CCD, these sensors are long and thin, and capture an image by recording a vast number of individual "exposures" while scanning across the picture frame. These are best suited for still subjects and continuous illumination.]



[Image of Sensors: Left...Full Size equal to a 35mm negative. Middle...APS...about 50% of the size of a 35mm...common to most inexpensive consumer digital cameras. Right...P&S Compact Digital Camera. Very small. Can be very high resolution...but still a very small form factor subject to a lot of noise artifacts...although many improvements are being made in the lesser expensive cameras.]

7. **Center-Weighted:** A method of determining the correct exposure for a photograph which gives more importance to the light meter reading at the center of the frame than to the peripheral areas. This method is often criticized for being too limiting to the photographer. The PowerShot utilizes a multi-point focal system that frees you from having to keep your subject centered at all times.
8. **Compact Flash Card:** A digital image storing mechanism that is increasing in popularity and thus functionality. Flash memory is a safe, highly reliable form of storage that doesn't need power to hold the images after they are saved. It won't erase the images unless the user chooses to do so.
9. **Compression:** The compression of digital files in a format that requires less storage space. Compression techniques are distinguished from each other by whether they remove detail and color from the image. Lossless techniques compress image data without removing detail; lossy techniques compress images by removing some detail. JPEG is a lossy compression technique and the standard file format. [Digital cameras usually store their images in JPEG format, which provides the best results with continuous-tone images, such as photographs, when the size of the file is an important factor. Some cameras offer additional file formats such as TIFF and a Proprietary RAW Format.]
10. **Diaphragm:** The adjustable aperture of the lens. It restricts the amount of light allowed into the camera. This term can also be applied to shutter types, i.e. iris diaphragm shutter, which is a set of interposing leaves, which open and close at a variable rate to produce a between-the-lens shutter.
11. **Digital Zoom:** Unlike an optical zoom, the digital zoom takes the central portion of the high-resolution sensor's image to achieve the effect of a zoom. This means that the existing data is not enhanced or added to, merely displayed at a lower resolution, thereby giving an illusion of an enlarged image. All PowerShot cameras utilize the superior optical zoom, which actually augments the data collected by the sensor, rather than merely creating the illusion that the image has been enlarged.
12. **Export:** The act of sending a file out through a specialized mini-application or plug-in so as to print or compress it. The term is also used to describe the action of saving the data to a specialized file format, i.e. JPEG, or GIF89a.
13. **Exposure:** Exposure explains how light acts on a photographic material. The lens opening controls light intensity, while the duration is controlled by the shutter speed. A camera with autoexposure can automatically control the exposure. The same principle works with digital cameras where film is replaced by the CCD.
14. **F-stop:** The number assigned to a particular lens aperture (or opening) size.
15. **Film:** A piece of plastic with a light sensitive mixture spread on it.
16. **Film processing:** The process where chemicals remove the unexposed silver on the film, then fix or stop the developing process and stop the negative's sensitivity to light. Now with PowerShot digital cameras, you are freed from the expense of film buying and processing.

17. **Film speed:** The film's sensitivity to light. For example, an ISO 100 film requires twice as much light as an ISO 200 film.
18. **Flash:** An electronic device that produces a burst of light the consumer can use to produce more exposure on the film.
19. **Focal length:** The distance from the rear model plane of a lens to the focus when the lens is focused at the infinity position.
20. **Focus:** To adjust the distance between the lens and an image to make the image as sharp as possible.
21. **GUI:** Pronounced "Gooney." Stands for **Graphic User Interface**. Refers a program interface that takes advantage of the computer's graphics capabilities to make the program, itself, easier to use. PowerShot software utilizes a GUI that is very effective because of its familiarity to popular browsers.
22. **Jaggies:** a.k.a. pixelization. Term for the stair-stepped appearance of a curved or angled line in digital imaging. [The smaller the pixels and the greater their number, the less apparent the "jaggies".]
23. **JPEG:** **Joint Photographic Experts Group**, *.jpg. A file format utilizing compression...the way an image is saved to a digital camera's memory. JPEG is a lossy compression technique, capable of reducing digital images files to about 5% of their normal size. [This is one of the reasons you can get as many images into your digital camera as you can. The results in decompression of the files can cause "blockiness," the "jaggies," or "pixelization" in certain digital images. The greater the compression level the more pixelization or "blockiness" that will occur. The greater the pixel count, the less pixelization that may occur.]
24. **Kilobyte:** 1,024 bytes, written KB, used to refer to size of files, which relates to the amount of information in a file.
25. **LCD:** Liquid crystal display. The flat screen on many digital cameras that preview photographs that have already been taken. LCDs utilize two sheets of polarizing material with a liquid crystal solution between them. An electric current passed through the liquid causes the crystals to align so that light cannot pass through them. Each crystal, therefore, is like a shutter, either allowing light to pass through or blocking the light.
26. **Lens:** One or more pieces of glass, specially shaped, arranged to bring together rays of light so they can be recorded.
27. **Lossy:** Data compression techniques that reduce some detail of a digital image are described as being "lossy." Most digital photo and video compression techniques utilize lossy compression. [In general, a camera's onboard computer tosses 20% of the data before it is ever written to the camera's memory card.]
28. **Megabyte:** 1024 Kilobytes, written MB, used to refer to the size of files or media such as hard drives. Refers to the amount of information in a file or how much information can be contained on a hard drive or disk.
29. **Megapixel:** 1,000,000 pixels. [Write out definition for Pixel (#36 below)]
30. **Memory:** The camera's storage medium. Flash memory is a safe, highly reliable form of storage that doesn't need power to hold the images after they are saved. It won't erase the images unless the user chooses to do so.
31. **Negative:** A reverse image in which shadows and dark areas of the photograph appear light, and in which light areas appear dark.
32. **Non-lossy:** a.k.a. lossless. Term that refers to data compression techniques that do not remove image data details in order to achieve compression. This method is generally less effective than lossy methods in terms of resulting file size, but retains the entire original image. [See also lossy.]
33. **Optical Zoom:** An optical zoom is made to bring you closer to your subject, without you having to move. Zooms are constructed to allow a continuously variable focal length, without disturbing focus. To achieve this, the optical zoom uses a combination of lenses that magnify the image prior to being registered at high resolution by the sensor. While the digital zoom only changes the presentation of existing data, with the optical zoom the data collected by the sensor is actually augmented.
34. **Over-exposure:** Expression used to indicate that the light sensitive material has been excessively exposed. This can be the result of light that is either too bright, or has been allowed to act for too long. In digital imaging, over-exposure is also referred to as blooming.
35. **Parallax:** The difference between the image seen by a viewing system and that recorded by the sensor/film. As subjects move closer to the lens, the variance increases. Only through the lens (TTL) viewing systems avoid parallax error.
36. **Pixel:** Short for picture element, Pixels are the tiny dots of information that make up a digital image. [The more pixels there are on the camera's image sensor (CCD or CMOS), the higher the image resolution will be. The higher the resolution, the clearer an enlarged print can be and the more it can be cropped.]
37. **Pixelization:** The step-like appearance of a curved or angled line in digital imaging. The smaller the pixels, and the greater their number, the less apparent the "pixelization" of the image. Also known as the "jaggies."
38. **Range finder camera:** A camera that uses a system of prisms and mirrors to bring an image into focus, even though the viewfinder (unlike an SLR) is separate from the lens. Also sometimes known as a lens-shutter or "point and shoot" camera.
39. **Red-eye:** Red-eye is the term used to describe the effect that can occur in photographs where the pupils of the eyes can take on a red color. The red color appears when the pupil of the eye is dilated, usually in a low light environment when the light of the flash strikes the retina at the back of the eye, reflecting the light through the wide-open pupil. [Also see Red-eye Reduction]

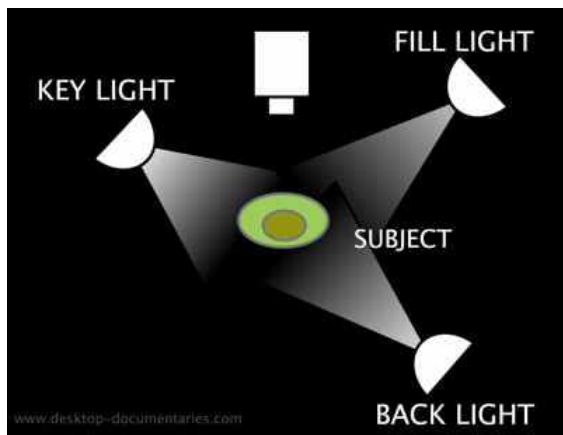
40. **Red-eye Reduction:** A system that causes the pupils of a subject to shrink by shining a light prior to the taking of the flash picture. This prevents the red-eye effect. [RED systems are INEFFECTIVE at best. Therefore, it is HIGHLY recommended that you turn this OFF on your cameras to improve capture time.]
41. **Reflex:** A reflex camera is one that utilizes a mirror system to reflect the light, and therefore the image, coming through the lens, to a visible screen. The image seen in the camera's viewfinder then is the same image entering the lens. This system provides the most accurate framing and focusing. Most reflex cameras reveal a high percentage of the image that will be photographed, upwards of 80%. Some reflex cameras are able to show 100% of the image frame into the viewfinder. The reflex system avoids the parallax problem that plagues most direct view cameras. See also SLR.
42. **Resolution:** Refers to the number of pixels, both horizontally and vertically, used to either capture an image or display it. The higher the resolution the finer the image detail that can be seen.
43. **Shutter:** A mechanism in the camera that controls how much light reaches the film.
44. **Shutter speed:** The length of time the shutter remains open when the shutter release is activated, expressed in fractions of seconds.
45. **SLR, or single-lens-reflex:** A user looking through the viewfinder on this type of camera actually looks through the picture-taking lens, thanks to a series of mirrors and prisms within the camera. This is a very improved type of viewfinder, because what you see is what is in the actual picture frame.
46. **TTL (through-the-lens):** Refers to a metering system that utilizes a light-sensitive mechanism within the camera body to measure exposure from image light passing through the lens. [TTL viewfinders reveal exactly what the lens sees, avoiding parallax problems. See also Autofocus TTL.]
47. **Under-exposure:** The result of too little exposure in the camera. In digital imaging, under-exposure can sometimes be corrected by the use of image editing software.
48. **Viewfinder:** System used for composing and sometimes focusing the subject. There are several types: direct vision, optical, ground glass screen or reflex.
49. **Wide-angle lens:** A camera lens with a short focal length, such as 24mm or 28mm.
50. **Zoom lens:** A lens whose focal length can be continuously adjusted.

Videography

1. **action lines** - lines drawn on a storyboard to indicate continued action
2. **aspect ratio** - the ratio of width to height. as on a TV screen; in most instances the current ratio is 3 to 4 (three units high, four units wide): this is an important ratio to remember when planning a storyboard or title

5:4 (1.25:1) Computer Displays	4:3 (1.33:1) SDTV / Video Digital Cameras Computer Displays	3:2 (1.5:1) 35mm Film Digital SLR Cameras	16:10 (1.6:1) Widescreen Computer Displays
16:9 (1.77:1) HDTV Widescreen SDTV	1.85:1 Cinema Film	2.35:1 Cinemascope	

3. **available light** - daylight or ordinary indoor light that is not enhanced by additional lighting
4. **backlight** - illumination from behind a subject



5. **bust shot** - a medium close-up shot of a person from the chest upward



6. **character** – electronically generated type or titles on a screen generation

7. **close up** any detail that fills the frame



8. **continuity** sequence of details from shot to shot, including light level and placement of objects cut to two scenes are abruptly butted

together (without dissolve or fade) [See clip from "This Christmas"]

9. **dissolve** - a transition that mixes from one shot to another; more pleasing than an abrupt transition dolly the camera and tripod move straight in or straight out from the subject

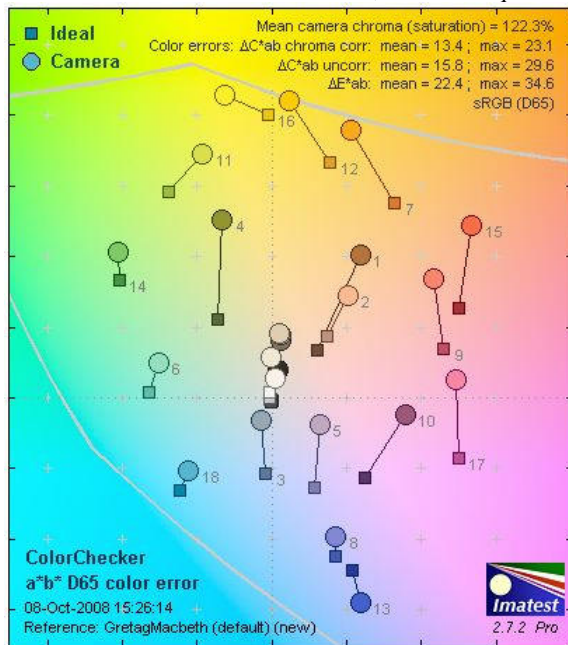
10. **fade out** - transition from video scene to black or color

11. **fade in** - transition from black or color to a video scene

12. **key light** - the principal light source illuminating a subject



13. **lux** - a measurement of illumination, the metric equivalent of a foot-candle



14. **medium shot** - for example, it photographing a person, this would be from the waist up



15. **microphone** - equipment that transmits the sound to videotape



16. **monitor** - part of a video system with higher resolution than the standard television set

17. **noise** - the amount of undesirable picture or audio signal

18. **panning** - to stand in place and move the camera lens horizontally either to give a panoramic shot or to follow a moving subject



19.



- 20. **pedestal** - move the camera straight up or down
- 21. **rack focus** - to take a shot either in-focus or out-of-focus; usually used for transitions



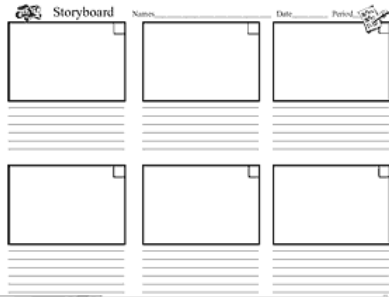
- 22.
- 23. **saturation** - strength or amount of a certain color in video signal



- 24. **soundtrack** - the background sound recorded while the video is being shot [The sound track is usually recorded on a separate machine...or at least a second camera for an A - B roll. A Clapper is used to sync the sound from the two recordings.

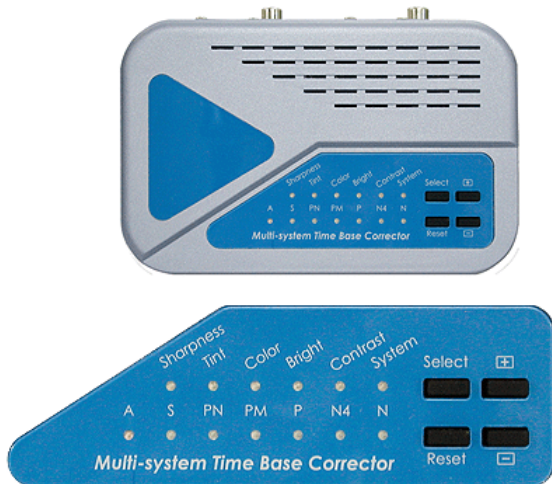


25. **storyboard** - a shot-by-shot plan for shooting videos; opening shots, lighting details, shooting angles tilt the camera tilts up or down in a



straight line.

26. **time-base** - device that electronically corrects the mechanical and electronic errors created by a corrector VCR



27. **tracking** - the camera follows along, recording movement
 28. **transition** - part of the editing process, sometimes indicating a change of time, location, or subject by use of rack focus, dissolve, or cut
 29. **truck** - sideways action of the camera to follow motion



30. **video gain** - amplitude of video signal
 31. **voice-over** - a commentary, usually added after the shot is made
 32. **white balance** - most cameras are already in white balance; if done manually, a white paper is held in front of the lens
 33. **wide shot** - a distance shot; a wide angle shot to take in a greater panorama or a full-length figure; if of a person, one would see the entire figure; use a wide-angle lens
 34. **wipe** - a horizontal or vertical effect of one visual image sweeping into and replacing another, simulating a shade being drawn
 35. **zoom** - optically bring subject closer or further away by moving the lens in or out

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