



Intro to Photography

Yearbook • Mrs. Townsend

To begin with

- Photography is about telling a story.
- Good photographers use an image to make a point without words.
- People remember pictures of events long after they remember the actual event or the words that were spoken

**What event does
this image portray?**





What landmark is this?

What emotion is being displayed?



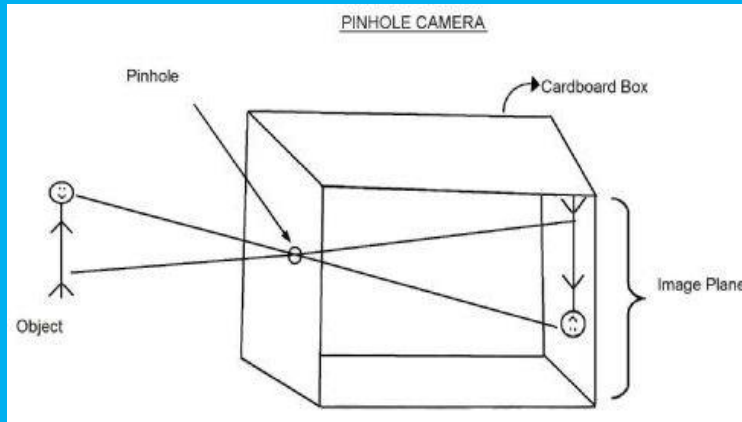
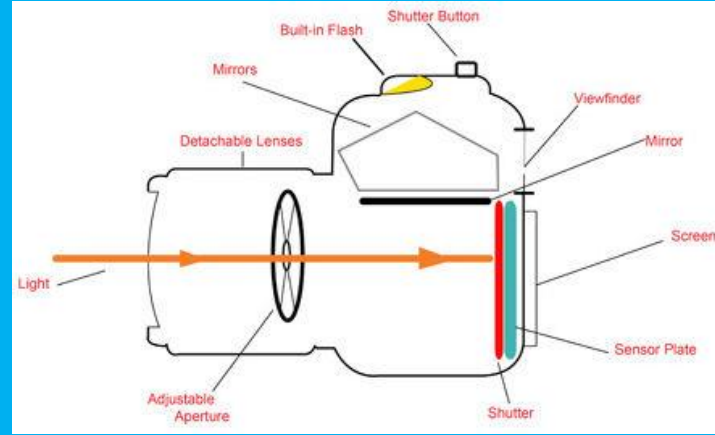
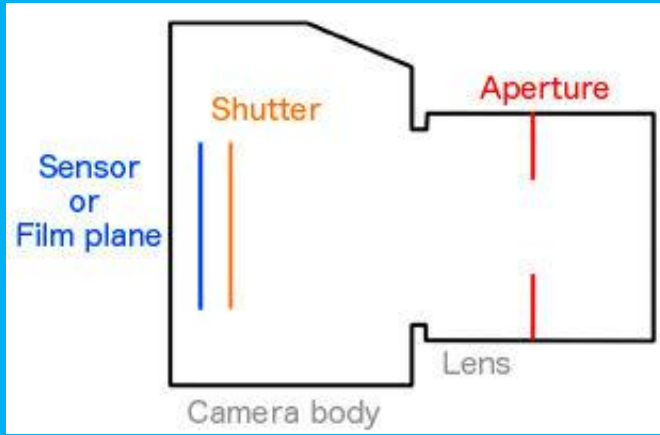
Thoughts about Yearbook Photography

- The essence of a yearbook is its photography (80% is pictures).
- People look at the pictures before they read the text.
- Include EVERYONE !

...When on assignment...

- Consider:
 - Distance from subject
 - Amount of light
 - Type of activity
 - Candid photos are always better than posed.
 - Capture emotion, expression and action.

Basic Parts of a Camera

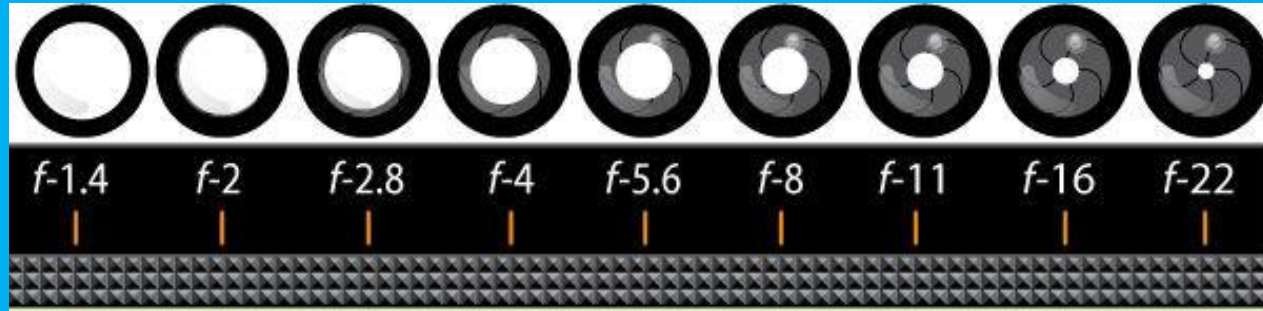


Depth-of-Field

How does **Depth-of-Field** change the photograph?

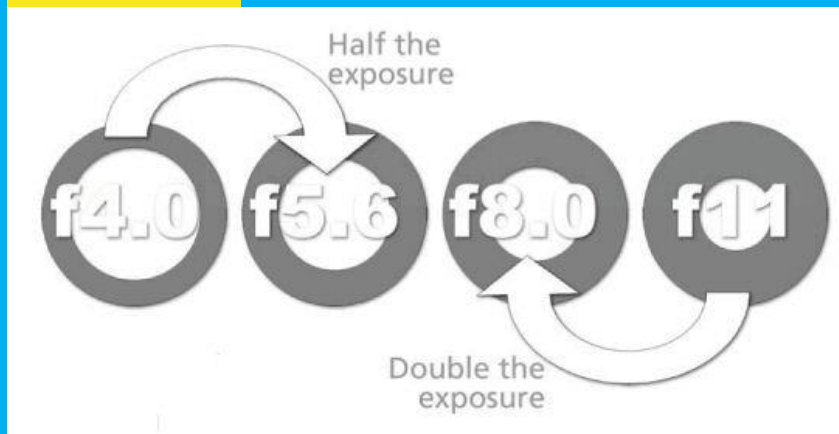
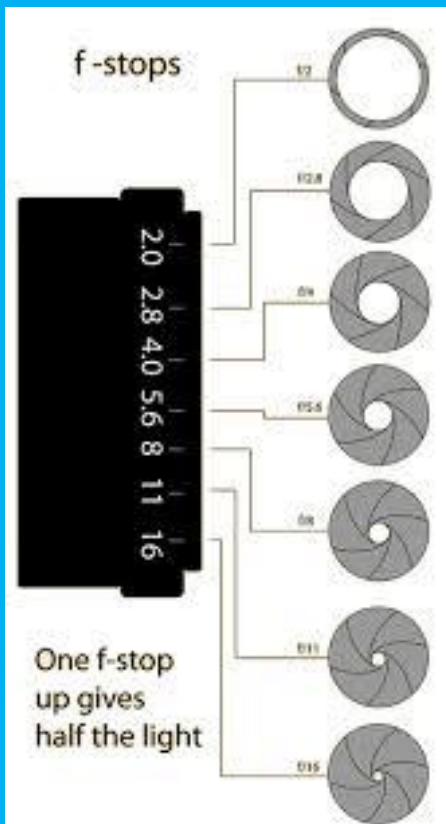


Aperture and F-stop



- Aperture regulates the size of the opening in the lens.
- F-stop measures the size of the aperture or opening.
- The bigger the F-stop the smaller the opening.
- F-2 is an “open” stop – lets in more light.
- F-22 is a “closed” stop - lets in less light.

F-stop



- Double the F-stop = 1/4 the Light
- Half the F-stop = Quadruple the Light

Depth-of-Field and F-stops

- Depth-of-Field = Amount in Focus
- Smaller F-stop = Less Depth-of-Field (less in focus)
- Larger F-stop = More Depth-of-Field (more in focus)



Depth-of-Field

Is this closer to $f/2$ or $f/22$?

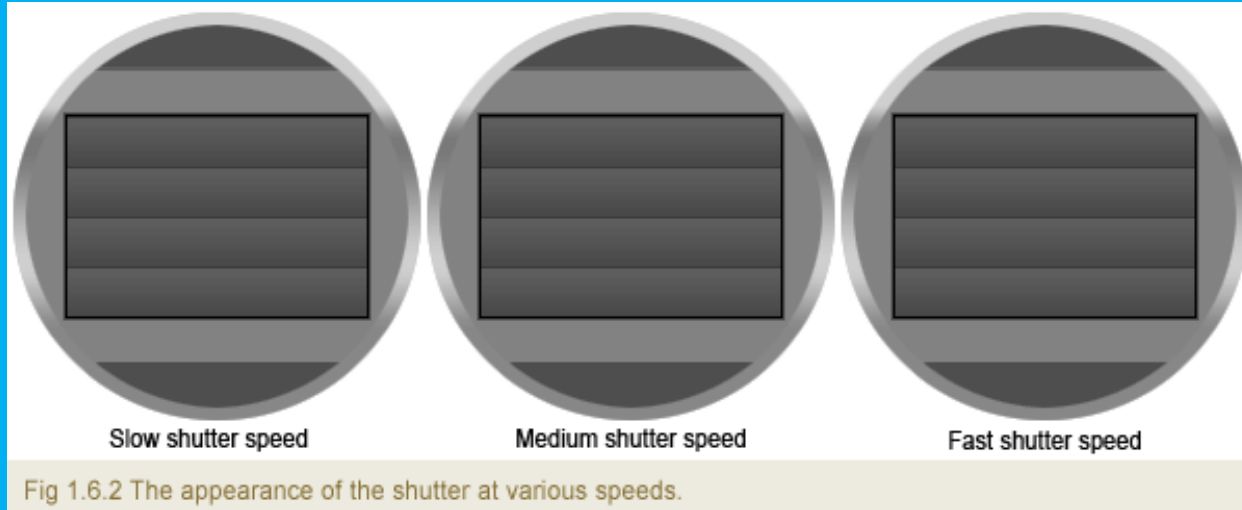


Depth-of-Field

Is this closer to $f/2$ or $f/22$?



Camera Shutter



- The camera shutter controls how long light enters the camera.
- A fast shutter speed is $1/1000$ of a second.
- A slow shutter speed is $1/2$ of a second.

Shutter Speed

These Standard Shutter Speeds . . .

1/1000 sec | 1/500 sec | 1/250 sec | 1/125 sec | 1/60 sec | 1/30 sec | 1/15 sec | 1/8 sec | 1/4 sec | 1/2 sec | 1 sec

Are written in the following format . . .

1000 | 500 | 250 | 125 | 60 | 30 | 15 | 8 | 4 | 2 | 1st

Faster Shutter Speeds

Slower Shutter Speeds

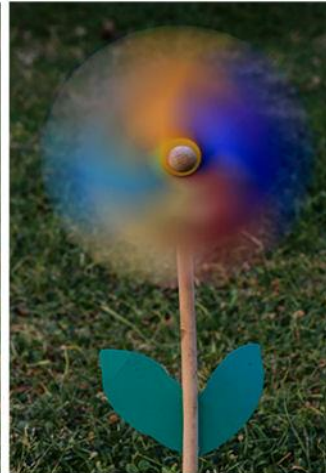
- A fast **Shutter Speed** can stop action.
- A slow **Shutter Speed** can blur action.



@ Shutter Speed 1/320 Sec



@ Shutter Speed 1/60 Sec



@ Shutter Speed 1/15 Sec

Stopping Action

For Sports, use a “fast” shutter speed, like 1/500 or 1/1000 to stop action.



- Using an external flash can stop Hummingbird wings because flash durations are typically 1/35,000 second.



- Hummingbird wings requires a shutter speed in excess of 1/10,000 second to stop action, which is not possible for most cameras.



Shutter Speed

Is this closer to 1/2 sec. or 1/1000 sec.?



Shutter Speed

Is this closer to 1/2 sec. or 1/1000 sec.?



Shutter Speed

Is this closer to 1/2 sec. or 1/1000 sec.?



Shutter Speed

Is this closer to 1/2 sec. or 1/1000 sec.?



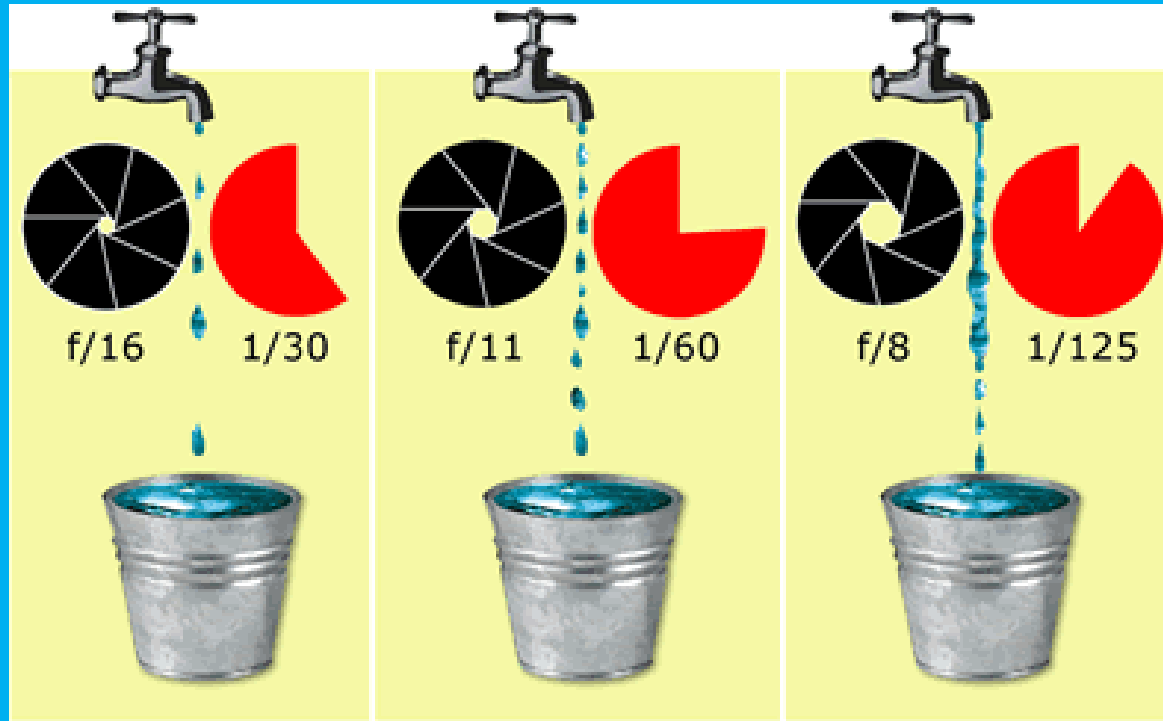
Exposure



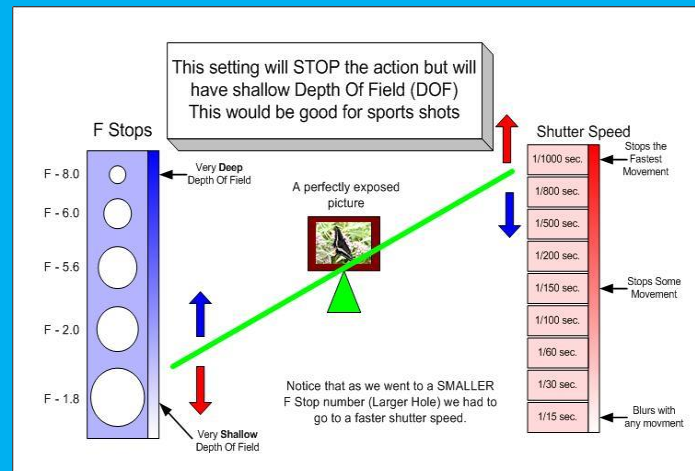
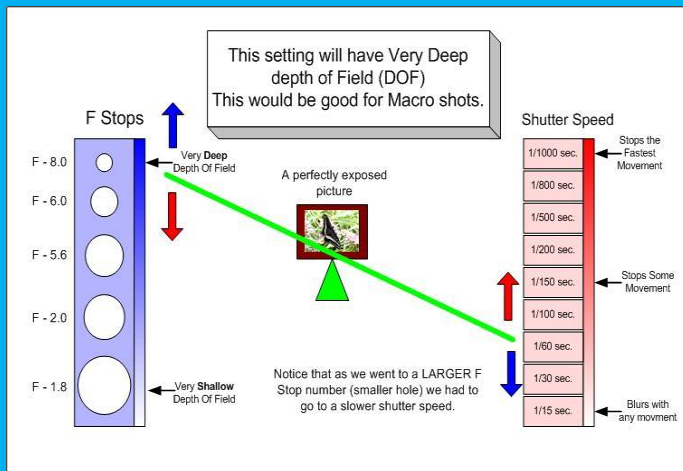
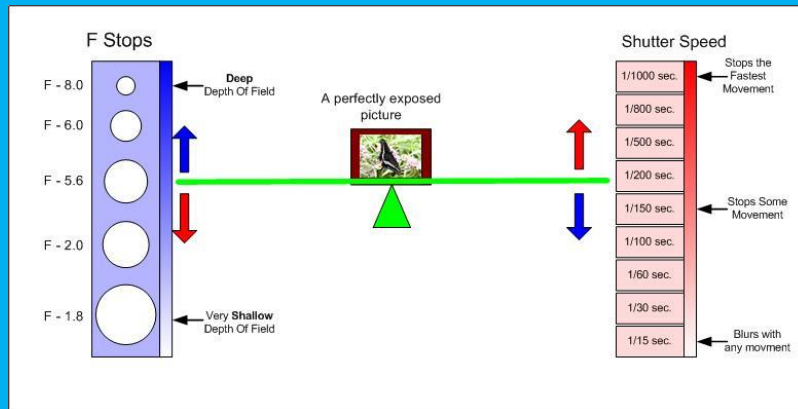
- **Exposure** is the amount of Light used to take a picture.
- Over-Exposure = Picture is too Light
- Under-Exposure = Picture is too Dark

Exposure

- Exposure is controlled by the aperture and the shutter.

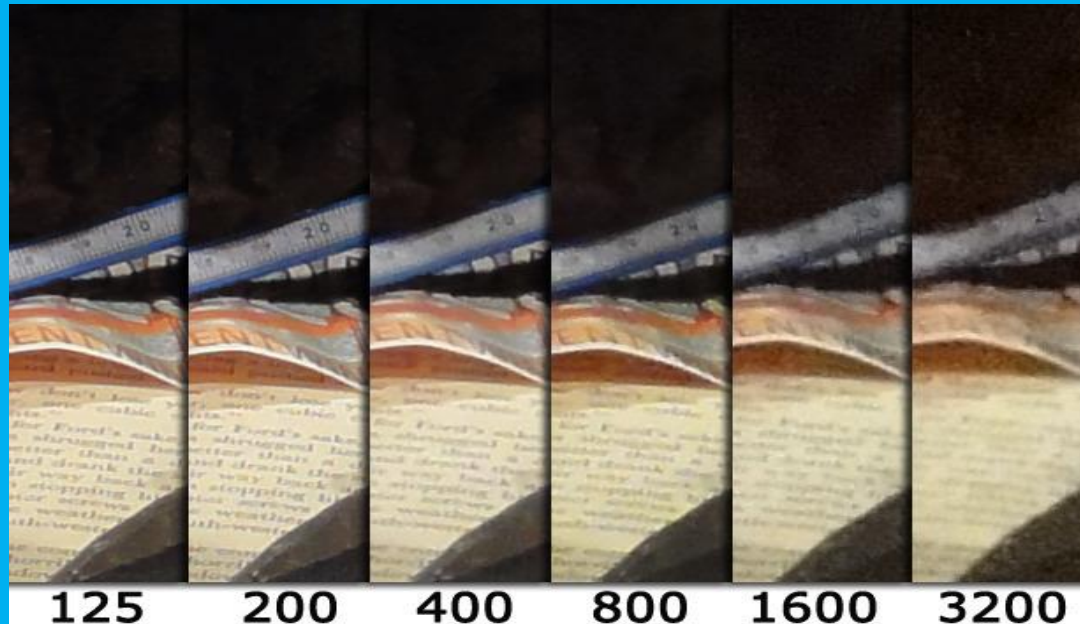


Exposure See Saw



Exposure and ISO

- ISO adjusts the cameras sensitivity to light.
- The higher the ISO, the less light is needed.
- The higher the ISO, the higher the image noise.



Lighting

“Natural” Light – light from the Sun (inside or outside).

“Ambient” Light – natural or artificial lighting that exists at the scene without a flash or other photographic lights.

“Flash” - a brief high intensity artificial light used to illuminate photographs at close range.



Lighting: Natural Light



Lighting: Natural Light



Front lit sun



Side lit sun



Back lit sun



Open shade

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CLEAR MIDDAY SUNSHINE - Primarily comprised of direct, downward sunlight. The hardest and most neutrally-colored lighting of any time of day, and typically is the least desirable natural light.



MID-MORNING & EVENING - Mid-morning and Evening light becomes slightly warmer, and begins to cast noticeable shadows making subjects often appear much more three dimensional.



SUNRISE/SUNSET (GOLDEN HOUR) - The hour just after sunrise or just before sunset provides very desirable light characterized by horizontal light that casts long shadows and gives subjects a warm glow and depth.



TWILIGHT, DAWN & DUSK - The half hour before sunrise or after sunset while the sky is still light but without direct sunlight. This light produces soft, multicolored lighting, from warm and reddish to cool blue or purple, that gives a calm, peaceful mood to subjects.



SHADE & OVERCAST SUNLIGHT - Typically has a cool, soft appearance, since the source of such light is spread across the entire sky, and doesn't include any direct sunlight.

What type of Natural Light?



Direct
Sun



Shade

What type of Natural Light?



Twilight

Sunrise

Noon

What type of Natural Light?



Dawn



Sunrise



Morning



Lighting:

**“Ambient”
Light**



Florescent vs. Incandescent Lights



Florescent Lights can add a bluish-green cast to photos.

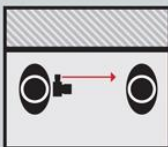
Incandescent Lights add a yellowish tinge to photos.

Most digital cameras have a **White-Balance** which can compensate for unflattering types of light.



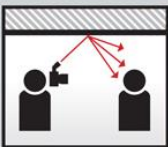
Flash Lighting

Standard flash



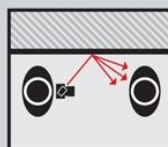
In this shot you can see that the flashgun was mounted on the camera, which was held vertically with the flash positioned to the side. This has created an unsightly shadow in the background. Ideally, you want to avoid this, and by bouncing the flash you'll create a more flattering portrait.

Bounced from the ceiling



In this portrait we rotated the flash so it pointed up towards the ceiling. As a result, the light was bounced off the white surface, which altered its direction. The end result is a soft diffused illumination that comes from above the model. The improvement here is plain to see.

Bounced from the wall



In some situations the ceiling might be too high, painted in a non-reflective dark colour, or you just might want to create subtle side-lighting instead. If so, try bouncing the light off the wall. Be aware, however, that if there's a strong colour on the wall it too will be reflected, adding a tint to your subject.

Flash Fill



Direct sunlight can create harsh shadows, especially if you do not want your subject squinting in the sun.

Using your **Flash** to **Fill** in the shadows can brighten an image.

Tip: Play with the flash

- Use the flash outdoors to correct for sun and shadows.
- Don't use the flash indoors...let the camera try harder to find the natural light.
- Make sure you know the “flash range” of your camera
- Stay within the camera range to take a good shot

Natural, Ambient or Flash Lighting?



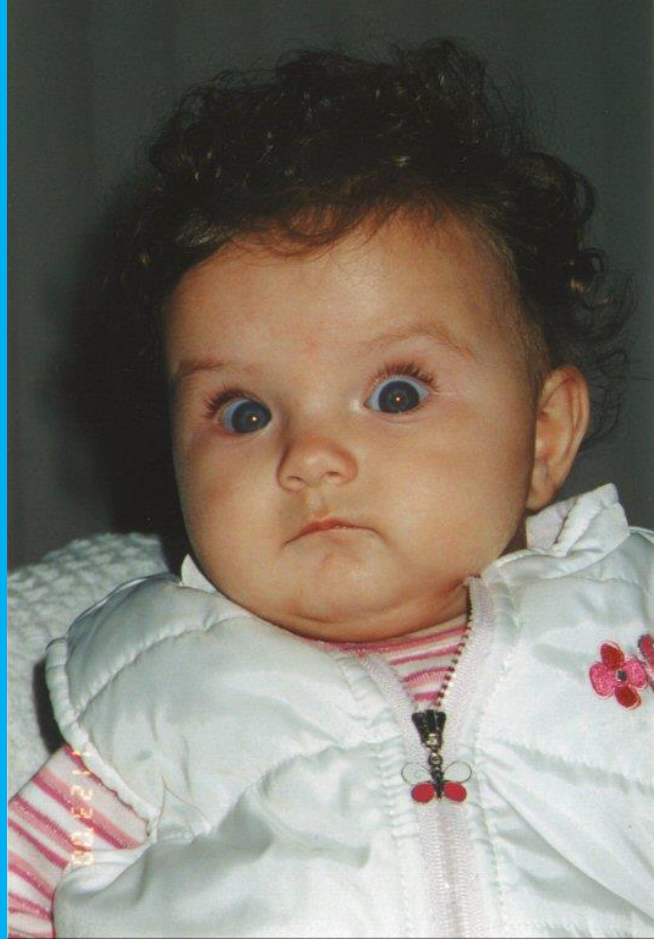
Natural, Ambient or Flash Lighting?



Natural, Ambient or Flash Lighting?



**Natural,
Ambient
or Flash
Lighting?**



Composition: “Rule of Thirds”

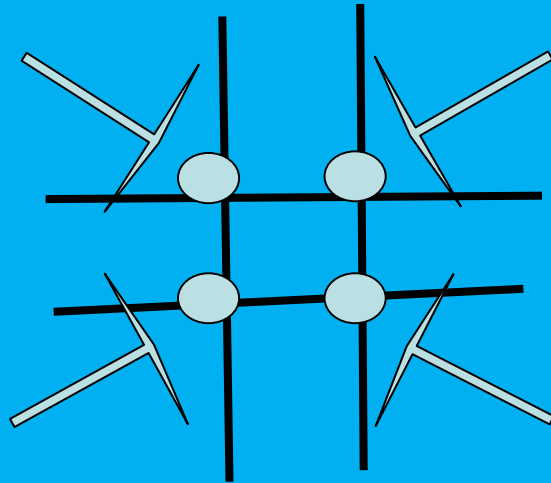
- Keep the subject of interest out of the center of the picture.
- The **Rule of Thirds** is applied by aligning the subject with the intersecting points of imaginary guide lines dividing the picture into nine (9) equal boxes.

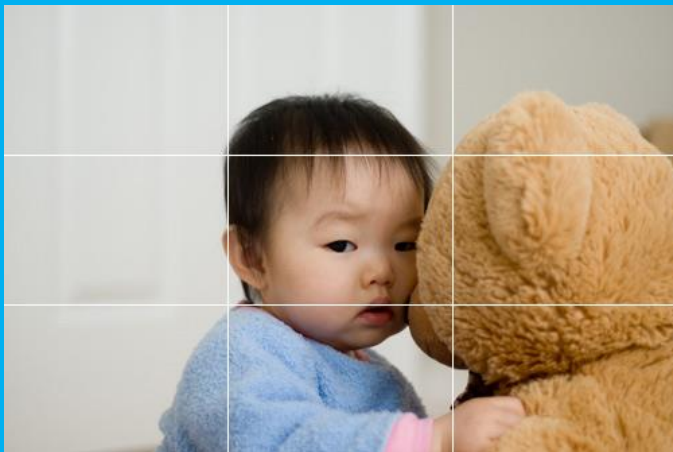
- One of the most important rules of composition.



Tip : Use the Rule of Thirds

- View your pictures as a grid and make sure that the subject of your picture is at one or more of the intersecting lines.





**Composition:
“Rule of Thirds”**

From Good
to
GREAT!





Composition: “Rule of Thirds”

Now the seagull has more room to fly, giving a greater sense of action and depth.



Bending “Rule of Thirds”

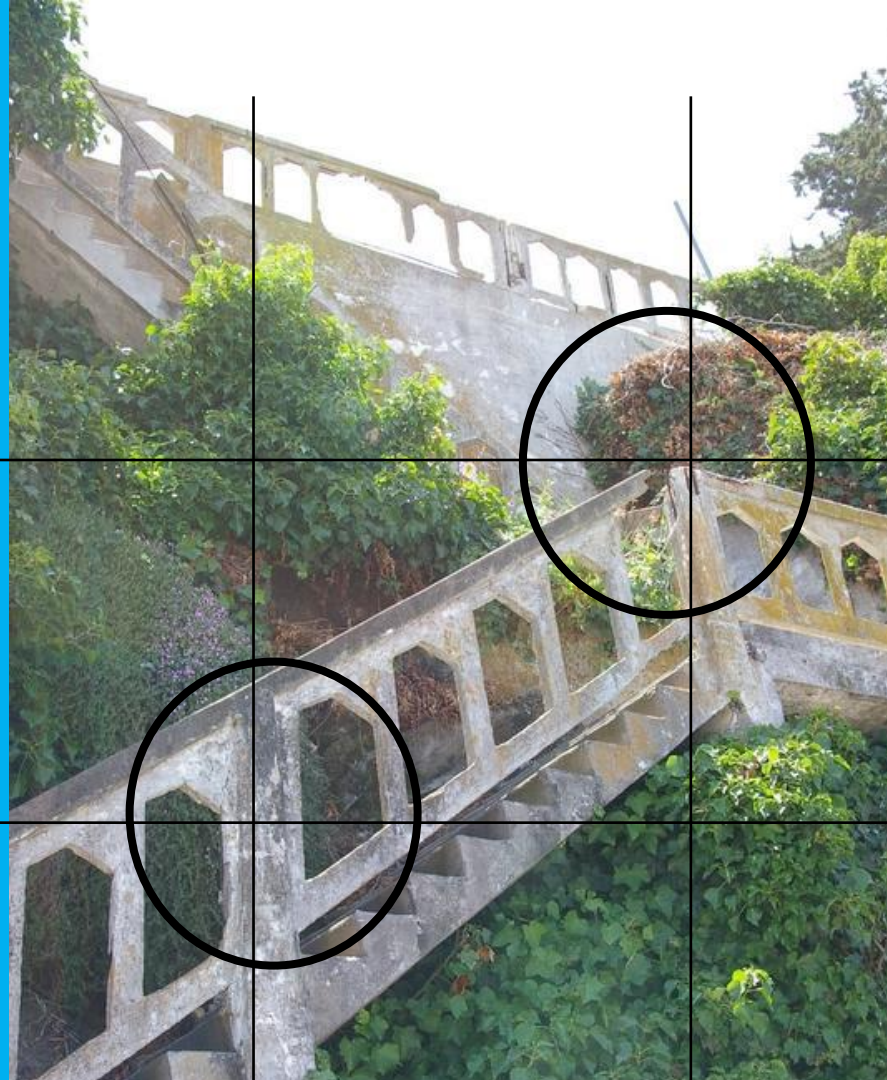
Rule of Thirds may be broken when other rules of composition are used to focus on the subject.

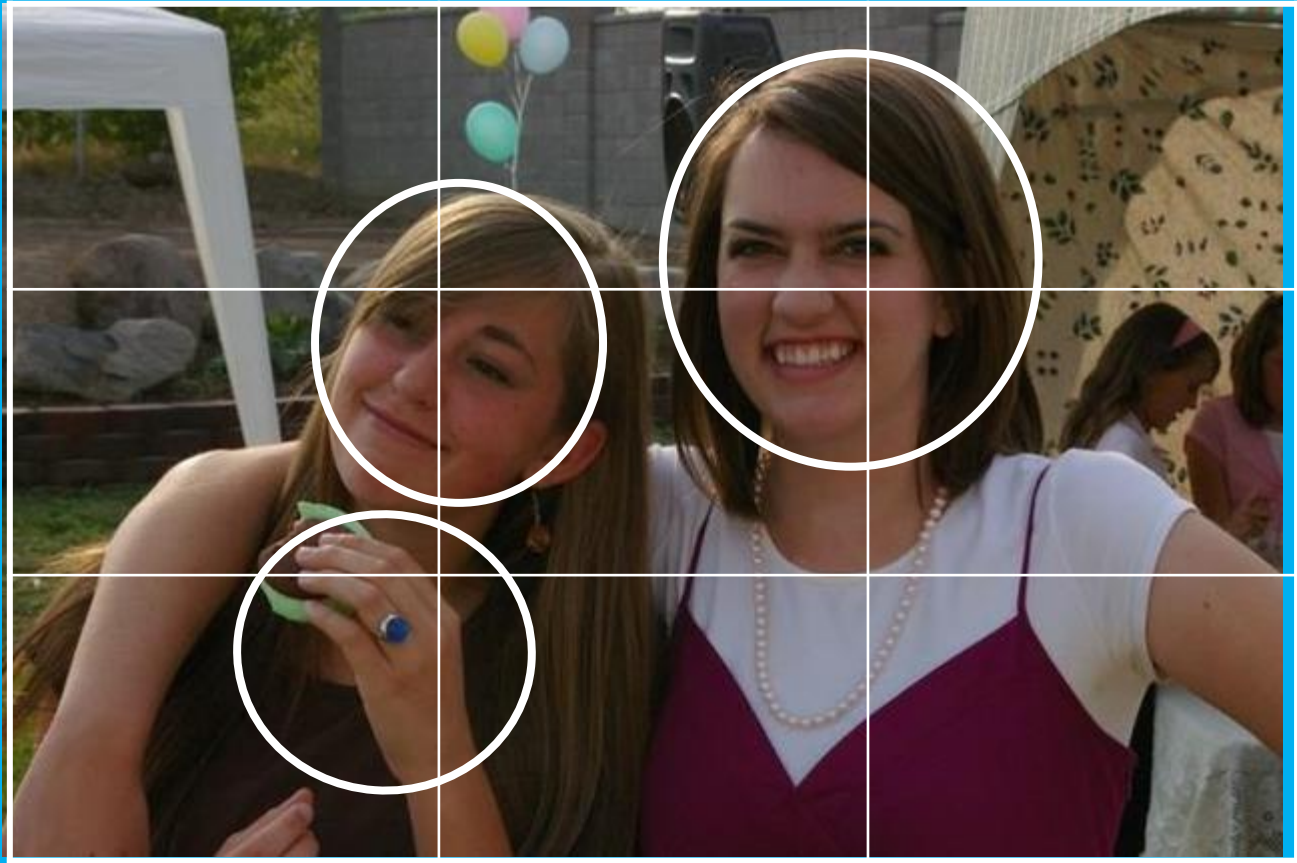
Learn to use the **Rule of Thirds** effectively before trying to break it, then you will be doing so to get a better composition and not just for the sake of it.

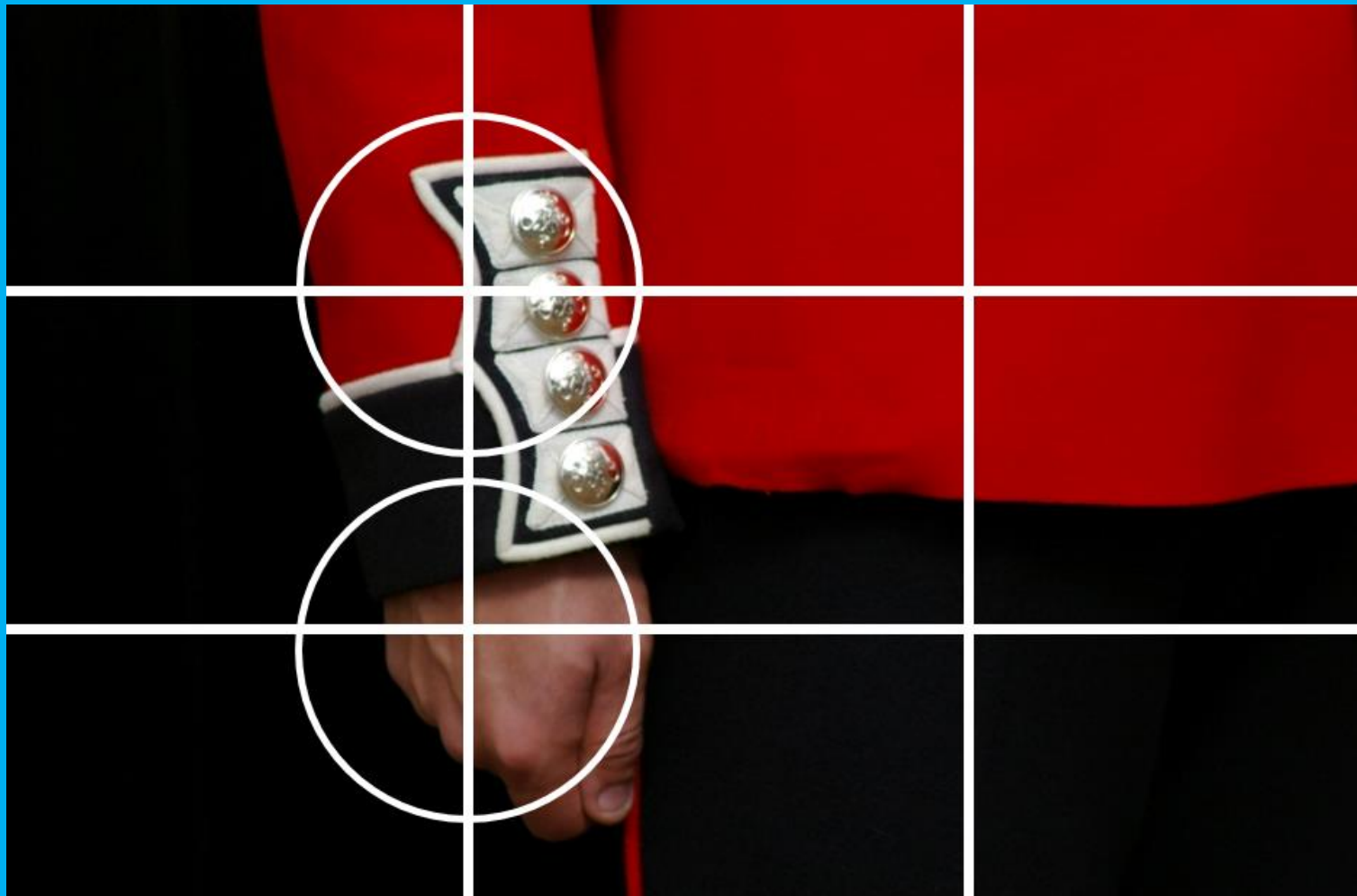
- Once you've mastered the **Rule of Thirds**, experiment with purposely breaking it to see what you discover.











Tip: Look your subject in the eye

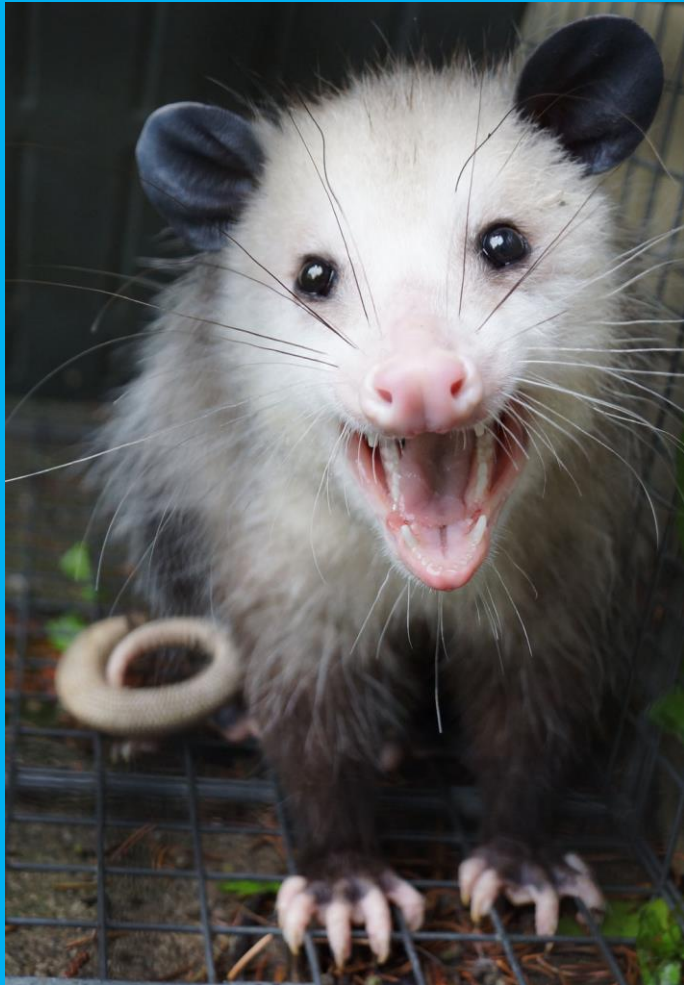
- Take a photograph of a person, animal or object from it's eye level, not yours.
 - This means get on the ground, get up high, and be constantly on the move with your subject.

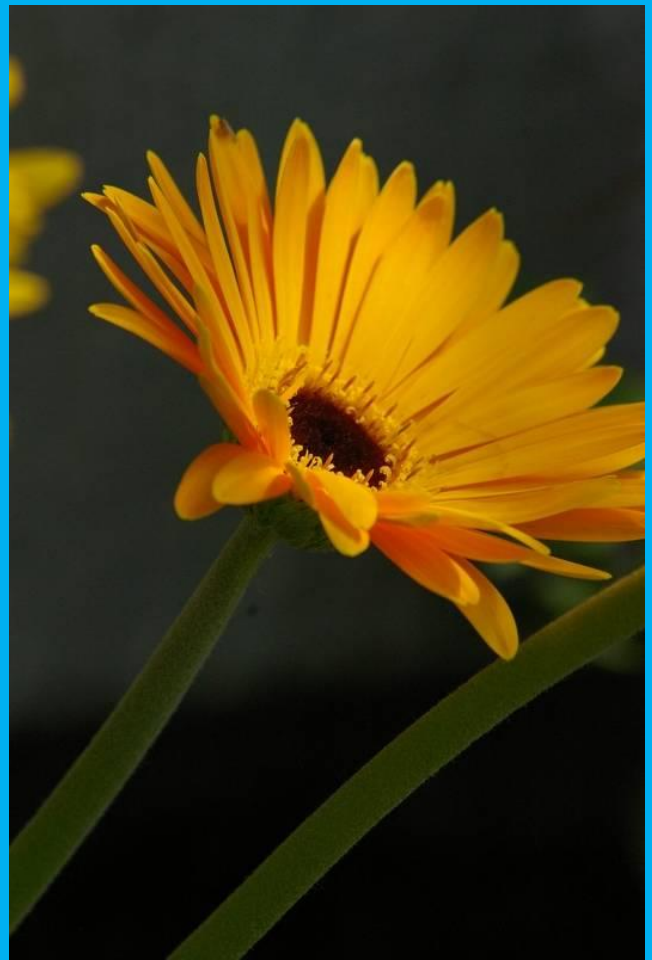












Composition: “Leading Lines”



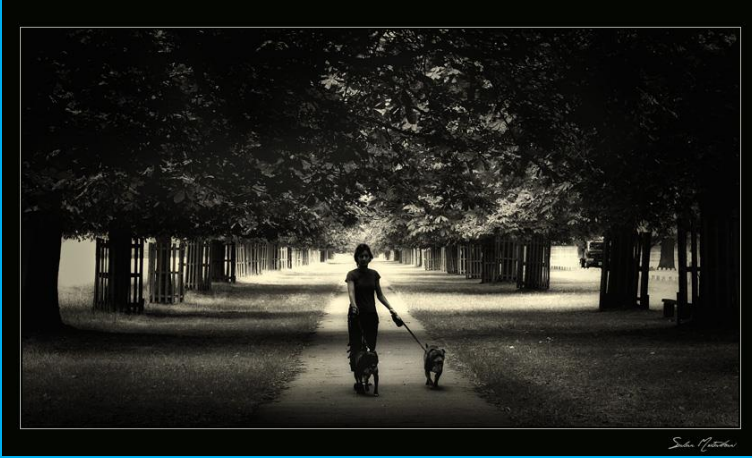
Leading Lines are used to draw a viewers attention to a specific part of a picture.

Composition: “Leading Lines”

Leading Lines can be almost anything: a road, path, sidewalk, fence, river, hedge, tree line or shadow.



Composition: “Leading Lines”



Leading Lines may draw a viewer's attention to the subject

...

... or to a vanishing point in the



Composition: “Leading Lines”



Tip: Simplify your background

- Keep your photo free of clutter.
- Keep backgrounds simple and plain.
- Avoid having extra people or subjects in your photo.
- By keeping the background clean and simple, you create an automatic focal point for your picture.







Tip: Be a picture director

- Avoid taking “snapshots”.
- Direct your subject.
- Create a theme.
- Move objects around.
- Remember that you are in charge of the photo.



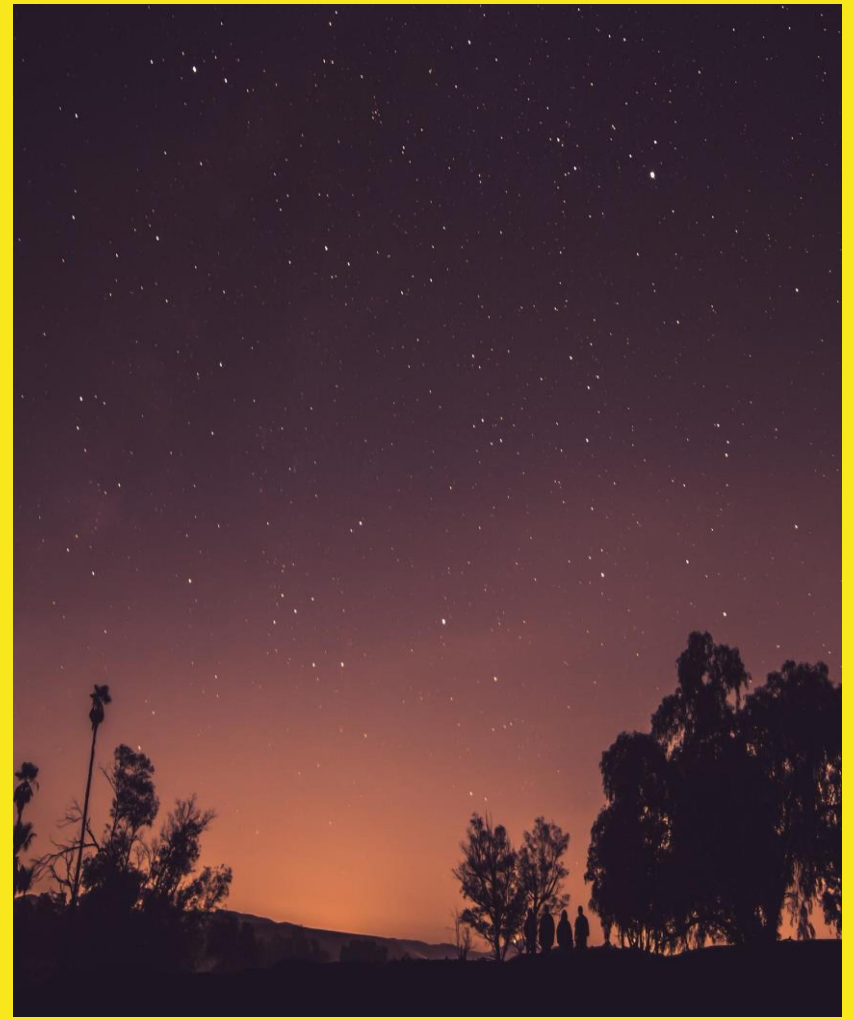
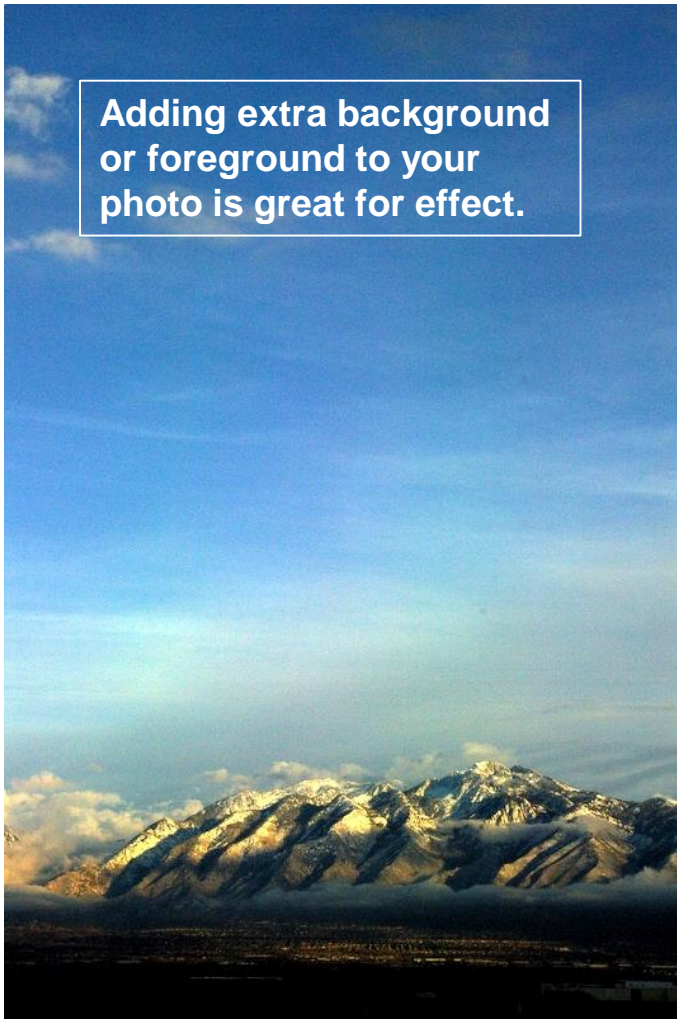




Sometimes, being a picture director means you have your camera ready at all times...so that if you see a great shot, you have the chance to take the photo.



**Adding extra background
or foreground to your
photo is great for effect.**



Composition: “Framing”

Framing is simply using other objects in your photograph to frame the main subject.



Composition: “Framing”



Use trees or objects to provide a natural “frame.”



Composition: “Framing”



Framing brings more depth to the picture and a better focus on what the main subject is.





When taking pictures of sporting events or school activities, remember to include the crowd, the participants, and the bench warmers. Everyone deserves to be remembered.

Tip: Move in close...then get closer

- “Macro” photography is always appealing to the eye.
- Close-up photographs are generally more interesting.
- Make your subject fill the entire frame of your picture.

Composition: “Macro Photography”



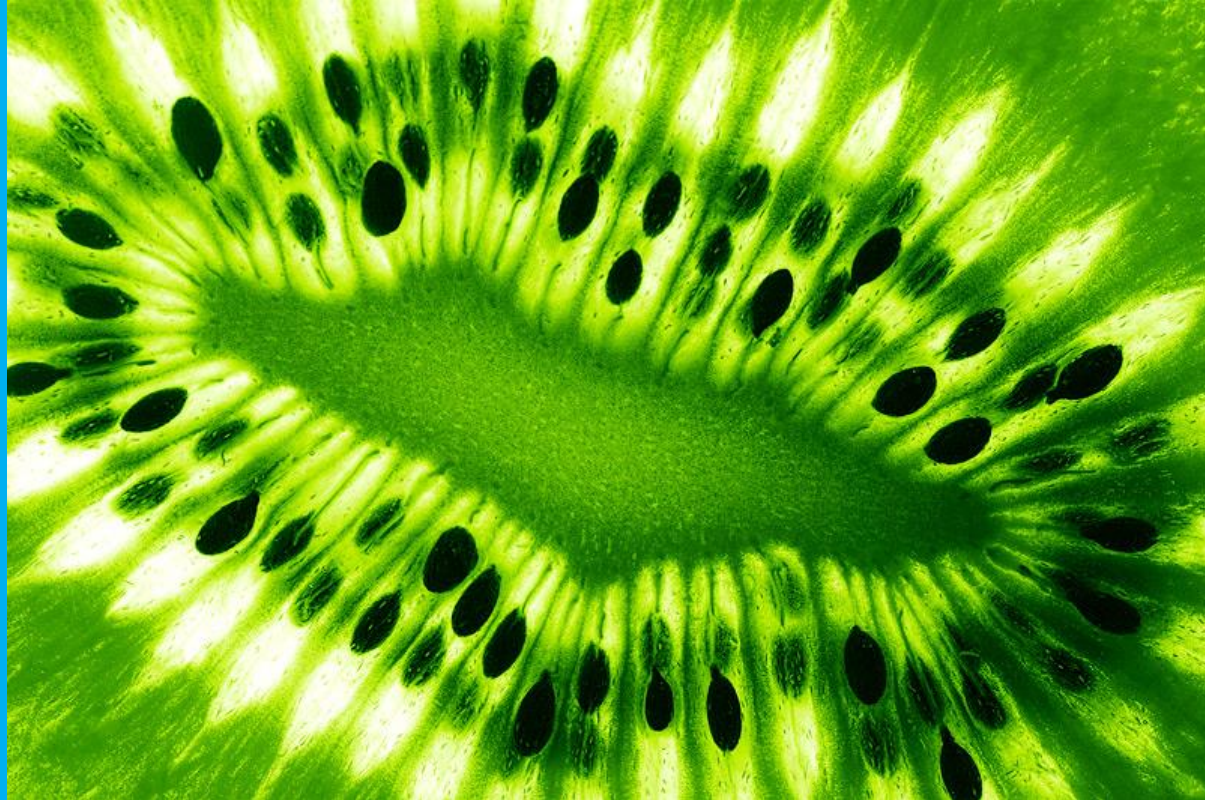
Composition: “Macro Photography”



Composition: “Macro Photography”



Composition: “Macro Photography”



Tip: Alter your camera angle

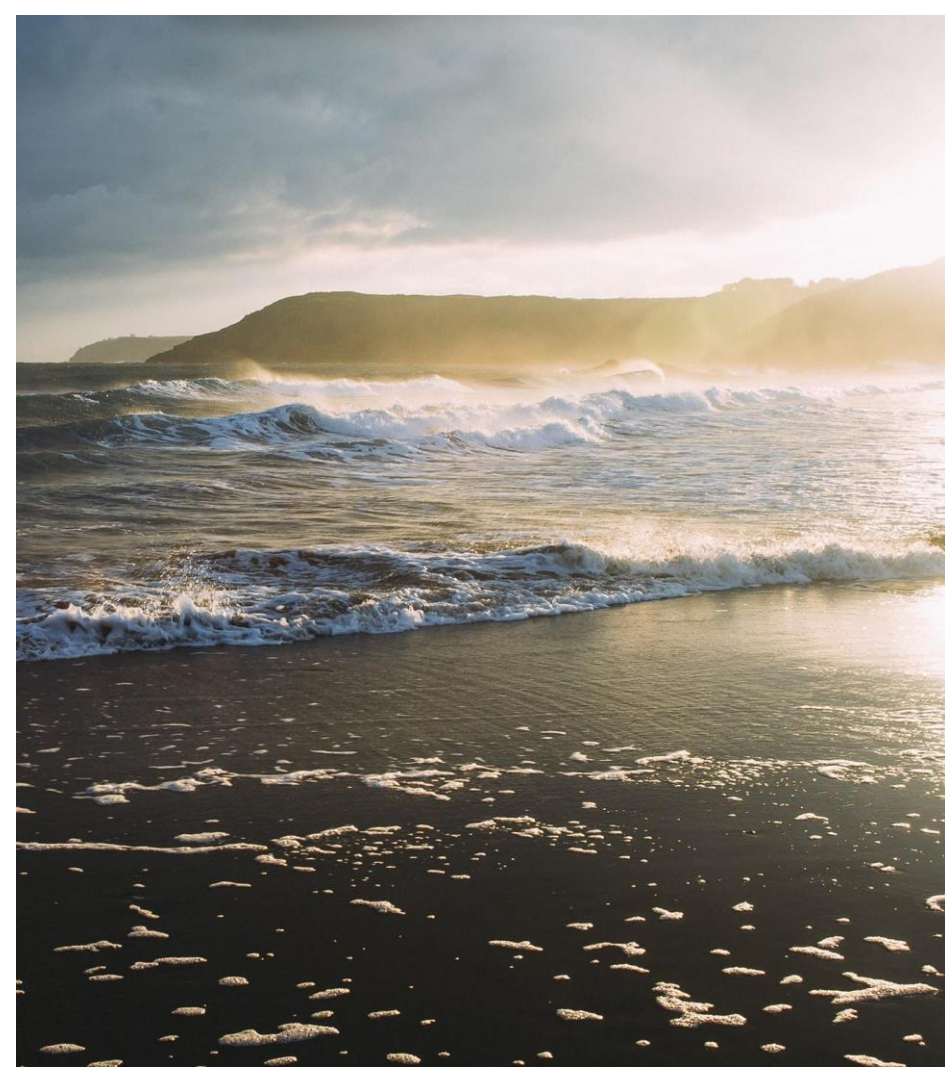
- Take vertical pictures.
- Shoot holding your camera at an angle.
- Get above and below your subject for effect.
- Play with wide angle and zoom options.



This picture is okay, but could it be better to create a mood or an emotion?



By altering your camera angle from horizontal to vertical, and by looking up at a specific section of a subject, you can really create an excellent composition.



Composition: “Depth”



To take it a step further, make sure there is a foreground, mid-ground and background to your image, which will dramatically allow you to take control of the sense of **Depth** in your image.

A good foreground can really give **Depth** to an image and make it **POP**.



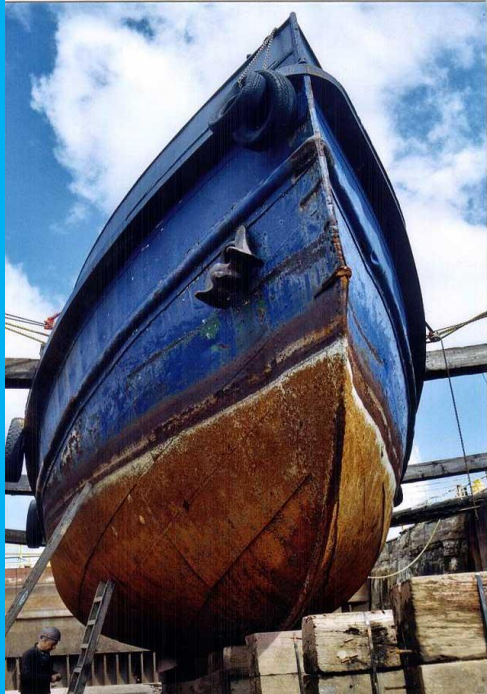
Composition: “Depth”

Depth can also be achieved by using all of the other composition rules: Rule of Thirds, Leading Lines, and Framing.



Composition: “Depth”

A change in viewpoint can strikingly alter the **Depth** of a photo.



Angling the camera up for a scenic shot is a fun way to experiment with converging lines to add **Depth**.

Try getting low to the ground to include some interesting foreground to add **Depth**.

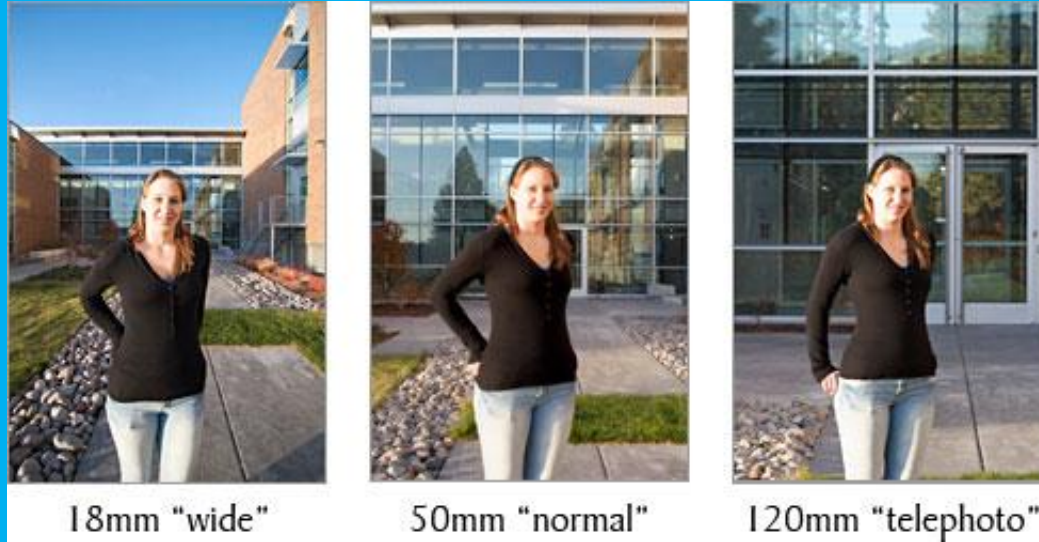
Depth with Light

The right lighting can add a three-dimensional feel to your photos.



For scenic shots, the late afternoon sun provides both a warm glow and **deepening** shadows which will make your photos stand out.

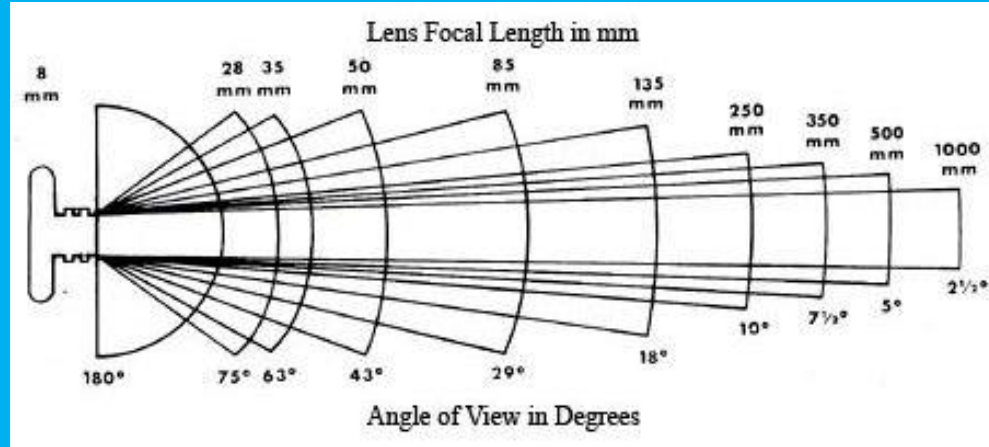
Depth with Lenses



Wide-angle lenses exaggerates **Depth** by making close objects appear larger while creating converging lines that make distant objects appear smaller than normal.

Telephoto lenses cause images to appear more compressed, with less background, reducing the sense of **Depth**.

Angle of View



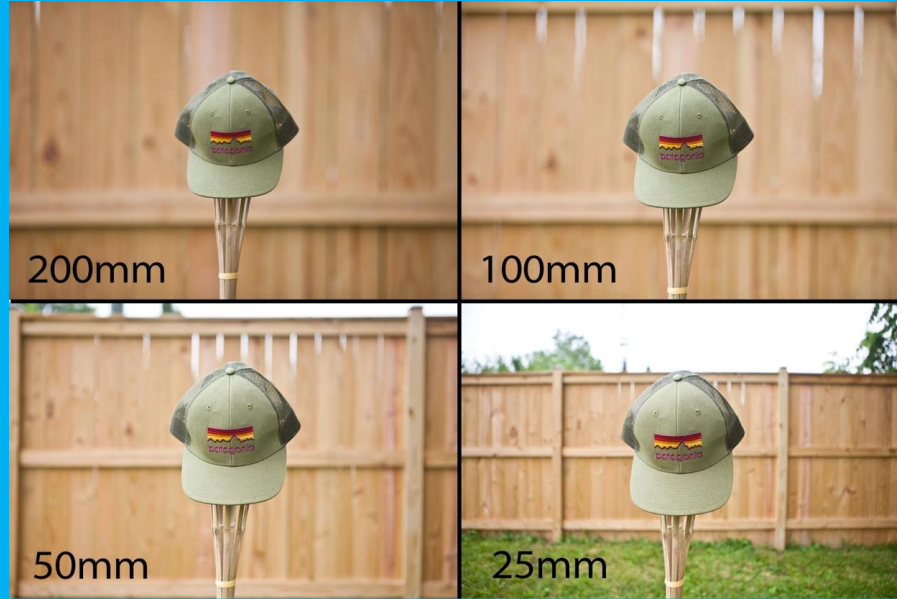
Angle of View is the maximum **view** a camera is capable of “seeing” through a lens, expressed in degrees.

Angle of View depends on a camera lens focal length stated in millimeters.

Smaller mm = wider **Angle of View** (wide-angle lens)

Larger mm = narrower **Angle of View** (telephoto lens)

Angle of View



With a wide **Angle of View (wide-angle lens)**, **MORE** of the background will fit in the image.

With a narrow **Angle of View (telephoto lens)**, **LESS** of the background will fit in the image.

Digital vs. Film Cameras



Sensor: Digital cameras use a light sensitive sensor (sometimes known as a CCD), while film cameras use a light sensitive film to record the image.

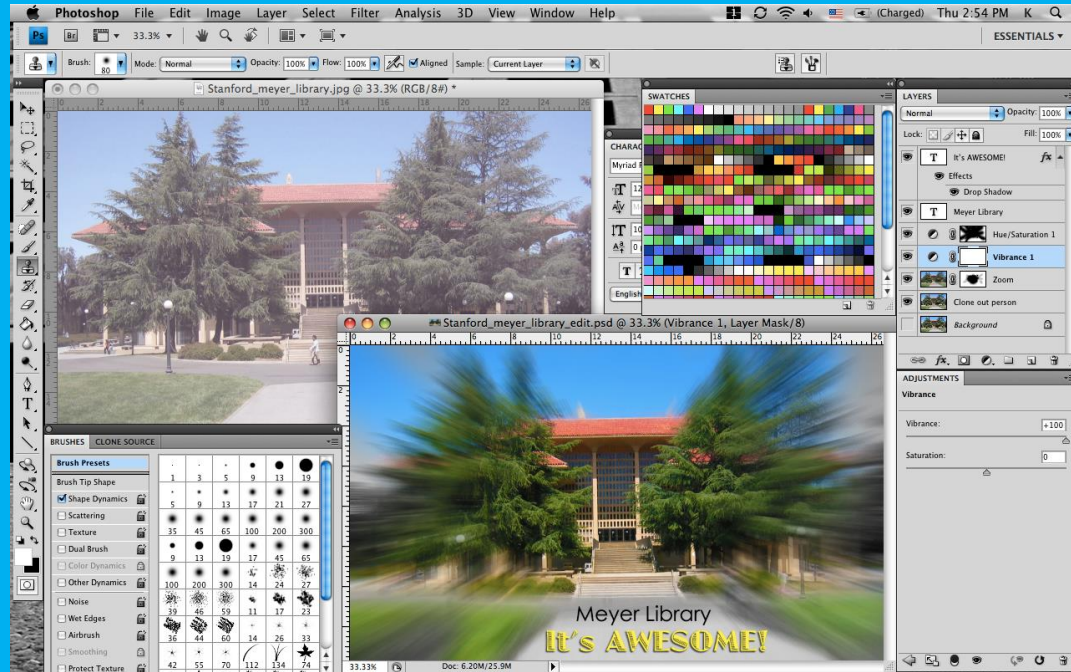
Cost and Feedback: Photos taken with a digital camera are kept in erasable memory, can be seen instantly, and can be discarded at no cost. Film camera require buying each roll of film, developing the negatives, and printing each negative before pictures can be seen.



Storage Capacity: Digital cameras can hold hundreds and sometimes thousands of photos on a single media. A roll of film generally holds no more than 36 photos.

Quality: High end digital SLR cameras have now surpassed film cameras in resolution, but film still captures a greater range of colors especially in the shadows.

Photo Software can:



1. Correct Brightness and Contrast
2. Correct and Enhance Color
3. Sharpen and Blur Images
4. Correct Red Eye
5. Crop Images
6. Restore and Retouch Photos

Photo Software can:



Create a Photo that is . . .

. . . Out-of-this-WORLD!

Career Opportunities

Photojournalist (newspaper/magazine/web)

Advertising/Corporate photographer

Architectural/Industrial photographer

Outdoor or wildlife photographer

Sports photographer

“Location” photographer

Fashion photographer

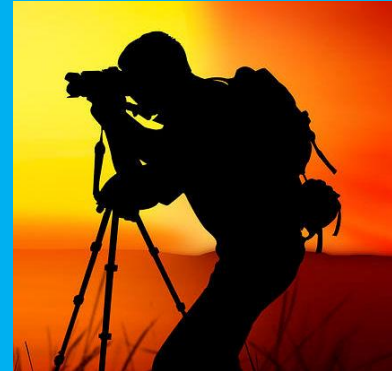
Forensic photographer



Education Requirements

Four (4) years of college (B.A. degree) and/or
2+ years apprenticeship as photographer's assistant

Lots of hard work!



Photography as a Hobby

Lifetime of fulfillment as a hobby

Can complement other hobbies

Difference between “professional” and “amateur” is ***not*** always skill level.



General Camera Tips

- Digital is easier and faster
- Have a backup memory card for every event (precautionary)
- 4-6 megapixels is all you really need
- Point and shoot vs. SLR
- Have a good file management system
- Back-up photos regularly
- Avoid cropping as much as possible

A few other thoughts about photography...

- Be spontaneous
- Take pictures of the unusual
- Use your photographs to show memories, not just to document events
- Be creative
- Think before you shoot
- Hold the camera steady (use a tripod when available)

