

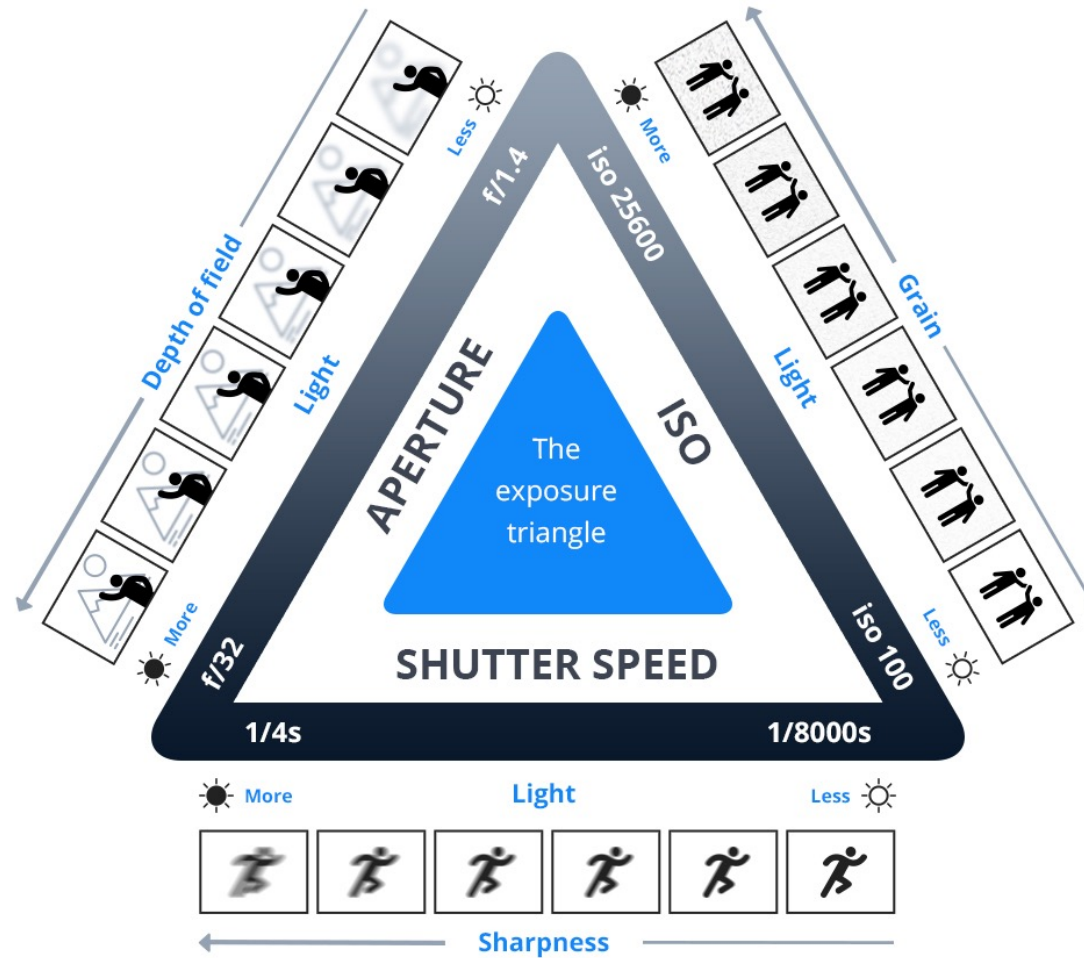


Exposure Triangle

Photography 11 & 12

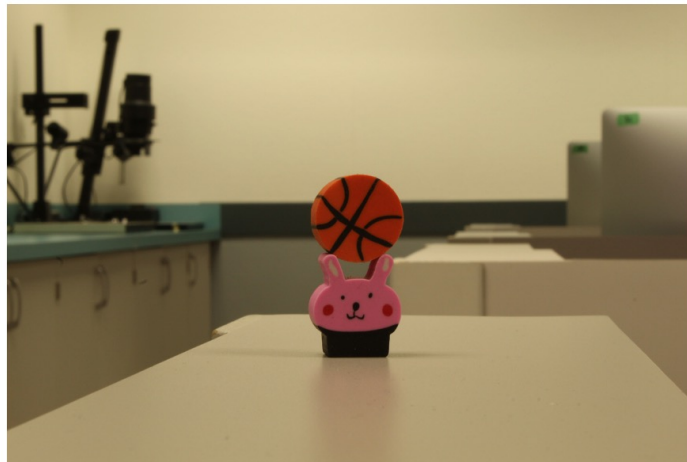
The Triangle of Photography

- *Light is the most important element of photography.*
- *Aperture* affects the amount of light that passes into the camera.
- *Shutter Speed* and *ISO* are also key parts to photography equation. These 3 setting on your camera work together to create what is known as the *The Triangle of Photography*.

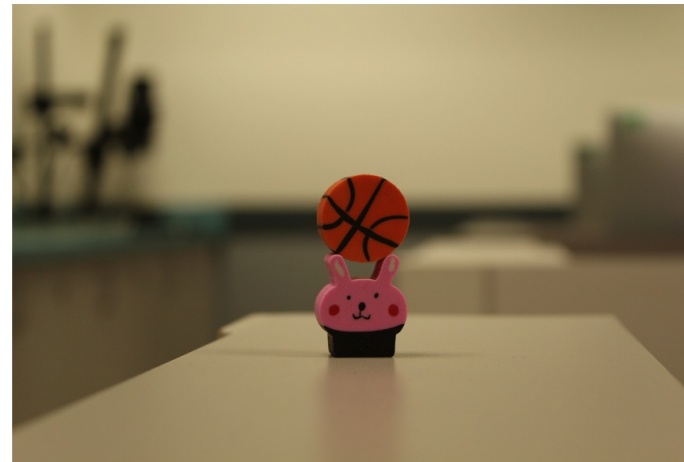


Aperture

- The opening of the lens – this works like the pupil in your eye.
- You can adjust the size of the aperture to allow light into your camera – this represented by the f-stop number.
- High f-stop = small opening (less light) and Low f-stop = large opening (more light)
- F-Stop setting examples – f/2, f/5.6, f/12, f/22
- Changes in f-stop will affect the depth of field in a photo (see example below)



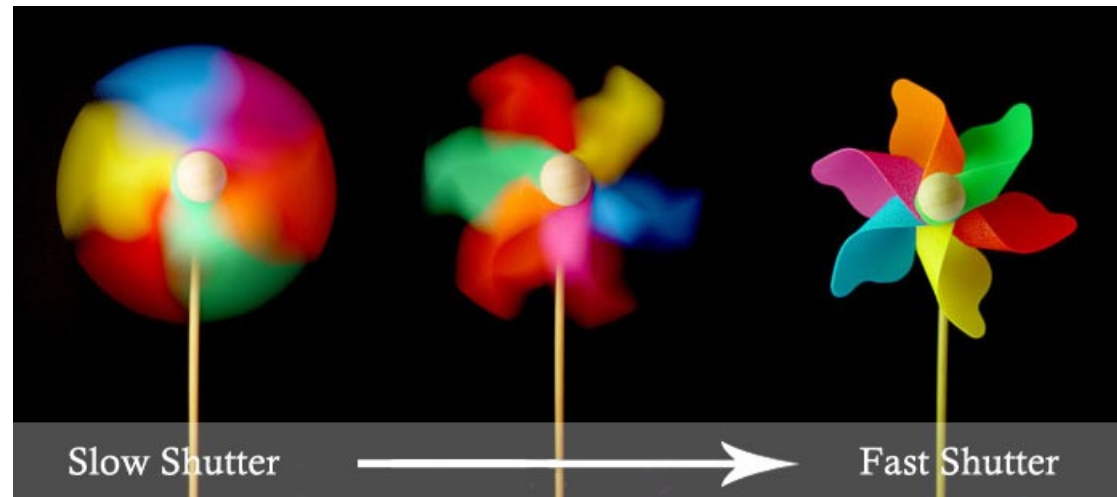
f/22



f/3.6

Shutter Speed

- Shutter Speed is the length of time a camera shutter is open to expose light into the camera sensor. It's kind of like how long we close our eyelids for when we blink.
- Shutter speeds are typically measured in fractions of a second, when they are under a second.
- Slow shutter speeds allow more light into the camera sensor and are used for low-light and night photography
- Fast shutter speeds help to freeze motion. This generally used for action or movement shots.
- Examples of shutter speeds: 1/15 (1/15th of a second), 1/30, 1/60, 1/125.



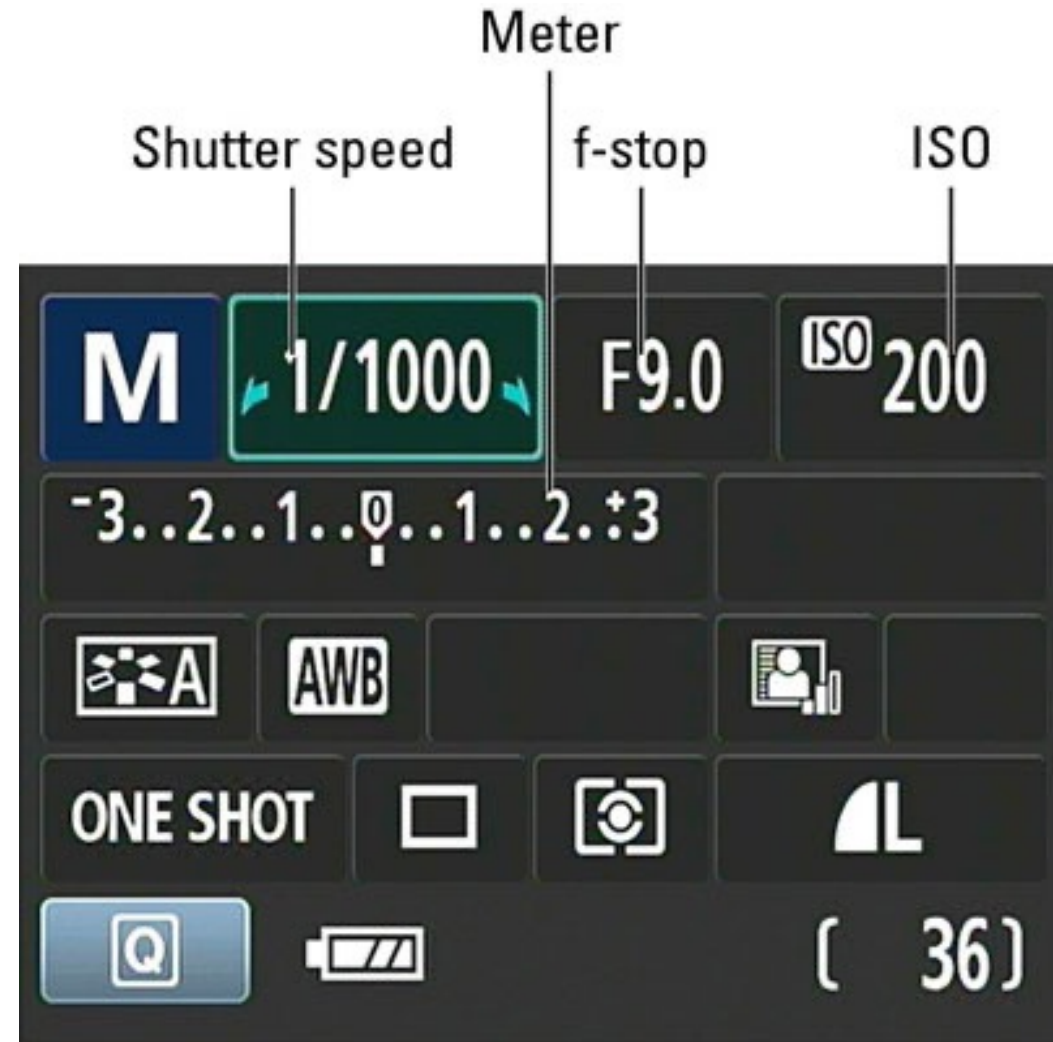
ISO

- A way to brighten your photos, if you can't use a longer shutter speed or a wider aperture.
- It is typically measured in numbers.
- Lower numbers represents a darker image, while higher numbers mean a brighter image.
- However, raising your ISO comes at a cost.
- As the ISO rises, so does the visibility of *graininess/noise* in your images. This can be used to your advantage for artistic shots.
- Examples of ISO: 100, 200, 400, 800, 1600.



Where are these on the camera menu?

- Shutter Speed, ISO, and Aperture are viewable on the top portion of the display screen on Canon cameras.
- For beginners, setting your camera to Aperture Priority and making minor adjustments is good way to learn how operate and take photos.



So how do we use these settings?

- Working within *The Triangle* can seem tricky at first, but if you follow a regular method, it can be straight-forward.
- Following the adjustment pattern of ISO -> Aperture -> Shutter Speed will be the most helpful.
- However, if you notice motion blur in your photos, go backwards and adjust accordingly.

