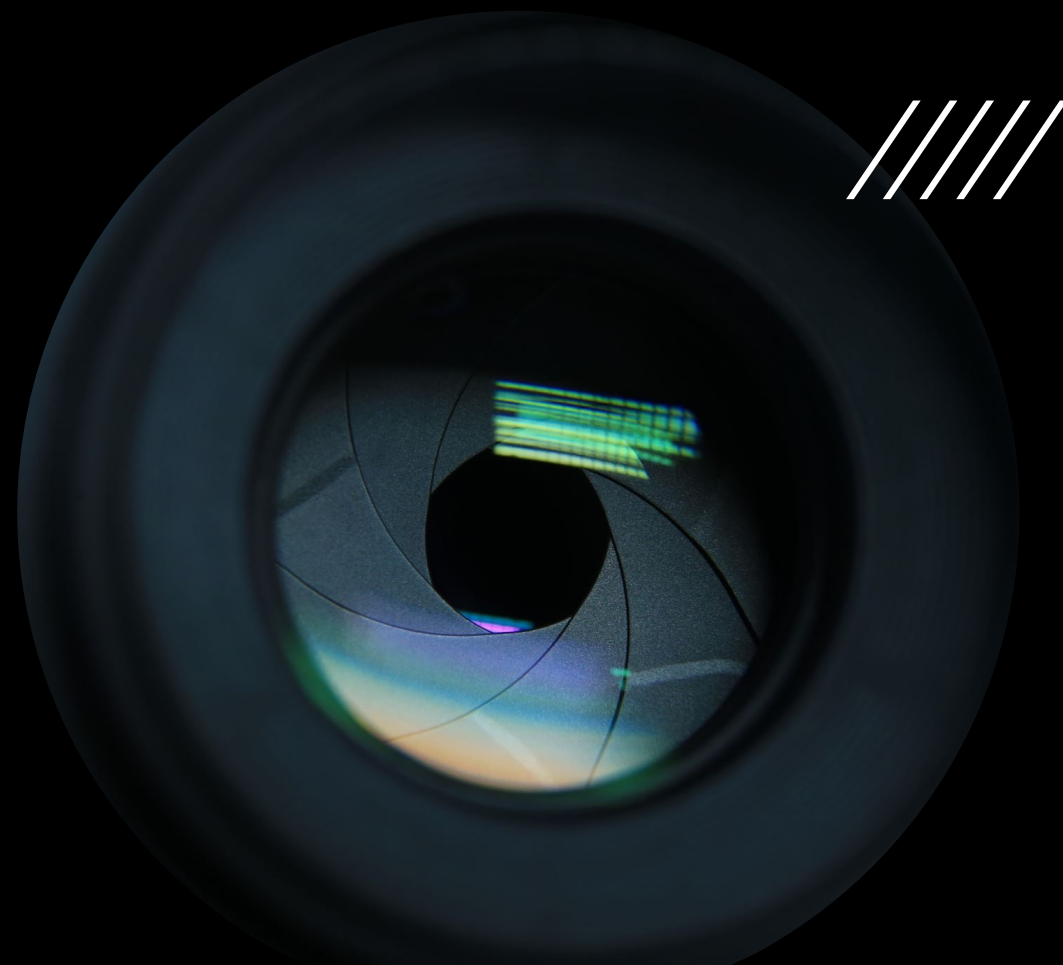
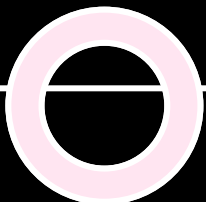




APERTURE

AN INTRODUCTION





The Triangle of Photography

- When exploring photography, it's important to be aware of the '*Triangle of Photography*'.
- This group is made up of *Aperture*, *Shutter Speed*, and *ISO*.
- Each of these elements works in balance with the other when we are taking pictures.
- In our first lesson, we will examine Aperture and how it works within photo-taking.



● What is Aperture?

Aperture is the opening in the lens. This determines how much light is passed through while an image is captured.

On a camera, the Aperture can be adjusted depending on the lighting in your photo area.

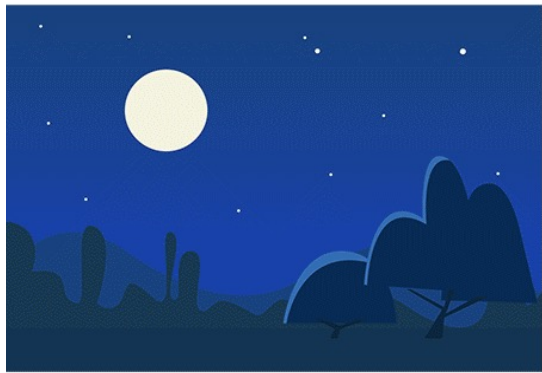
- This concept is very similar to how your iris and pupil work in your eye.
- In dark situations, your iris will relax (open) and allow your pupil expand to allow more light in so that you can see better.
- In light/bright situations, the iris will contract (close) and your pupil will get smaller, so less light gets in.



● What does Aperture affect in photos?

- The brightness / exposure of your photos
- Depth of field
- Sharpness loss due to diffraction
- Sharpness loss due to lens quality
- Starburst effects on bright lights
- Visibility of camera sensor dust specks
- The quality of background highlights (bokeh)
- Focus shift on some lenses
- Ability to focus in low light (under some conditions)
- Control amount of light from flash

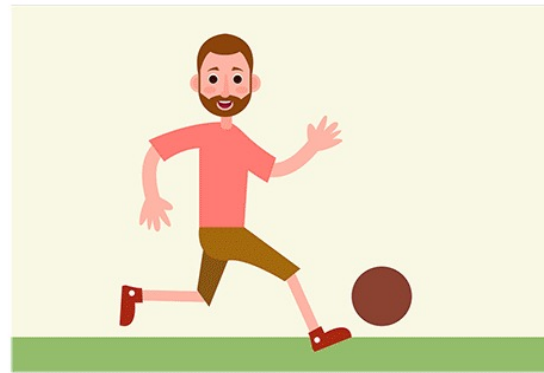




f/1.4



f/2



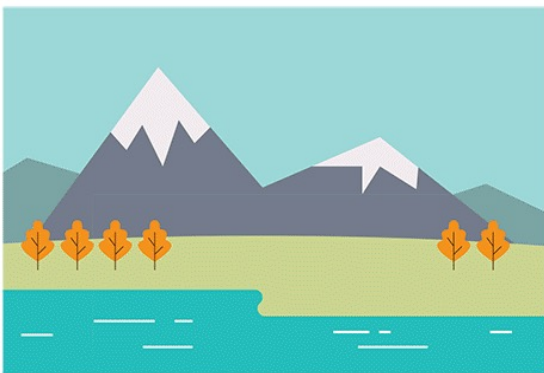
f/2.8



f/4.0



f/5.6



f/8



f/11



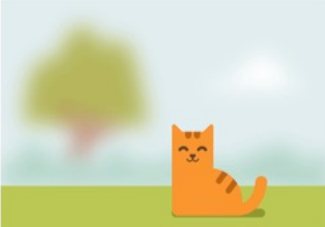
f/16

● F-Stops

- In camera-speak, Aperture is referred to as **F-Stops**.
- When looking on the menu of a DSLR camera, f-stops will be marked as something like **f/8** or **f/2** or **f/16**
- The rule of thumb with f-stops is the *smaller the number, the larger the aperture*.
- This means the smaller the f-stop, the more light will be passed through the camera and be added to your photo.





				
f/1.4	f/2.8	f/5.6	f/11	f/22
Very Large Aperture	Large Aperture	Medium Aperture	Small Aperture	Very Small Aperture
Very Small Depth of Field	Small Depth of Field	Medium Depth of Field	Large Depth of Field	Very Large Depth of Field
Almost Nothing In Focus	Little In Focus	Some In Focus	Much in Focus	Almost All In Focus
				
Brightest	Bright	Medium	Dark	Darkest



● F-Stop Examples



f/1.8



f/2.8



f/4.0



f/5.6



f/16



f/22



● F-Stop Examples



● F-Stop Examples

Aperture Adjustment Sequence - Exposure



f/4.0



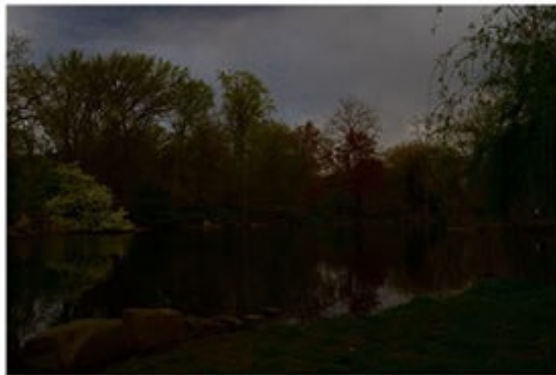
f/5.6



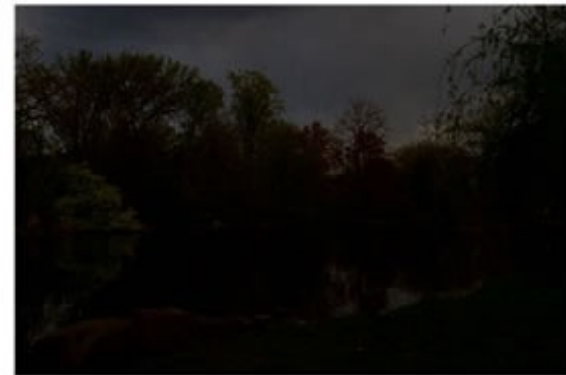
f/8.0



f/11



f/16



f/22

