Let's switch to Manual Mode!



Aperture



Shutter Speed



Light Sensitivity



Aperture

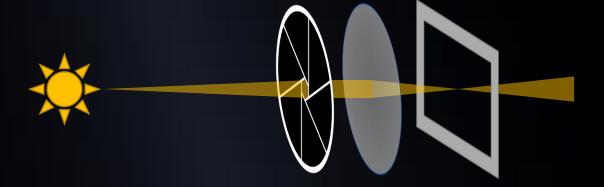
Aperture: opening in the lens through which light passes to reach the camera sensor or film.





Learn the Exposure Triangle

Aperture: opening in the lens through which light passes to reach the camera sensor or film.





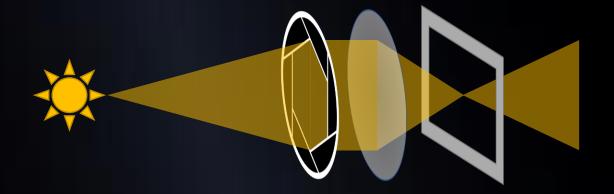


ISO Light Sensitivity



Learn the Exposure Triangle

Aperture: opening in the lens through which light passes to reach the camera sensor or film.





Learn the Exposure Triangle

It is measured in f-stops, which is a ratio of the focal length to the diameter of the aperture.





Aperture

Aperture affects depth of field and image sharpness.







Learn the Exposure Triangle

Aperture affects depth of field and image sharpness.













Learn the Exposure Triangle

Aperture affects depth of field and image sharpness.











Learn the Exposure Triangle

Aperture affects depth of field and image sharpness.





Shutter Speed



ISO Light Sensitivity



Aperture

Time to grab your camera and practice!

Let's look at how to set different apertures and experiment with your camera!



Learn the Exposure Triangle

Shutter speed: amount of time the camera's shutter is open to allow light to reach the camera sensor or film.







Learn the Exposure Triangle

It is measured in seconds or fractions of a second.





ISO Light Sensitivity



Learn the Exposure Triangle

Shutter speed affects how motion is captured in a photograph.







Slow Shutter Speed



Fast Shutter Speed



Creative use of Shutter Speed







Learn the Exposure Triangle

Time to grab your camera and practice!

Let's look at how to set different shutter speeds and experiment with your camera!







ISO Light Sensitivity

Learn the Exposure Triangle

ISO refers to the camera sensor's sensitivity to light.



Aperture





Light Sensitivity

Learn the Exposure Triangle

ISO amplifies the light signal hitting the camera sensor.





Learn the Exposure Triangle

ISO also increases the amount of digital noise in the image, which can degrade image quality.

ISO 200





Aperture





ISO Light Sensitivity

Learn the Exposure Triangle

ISO also increases the amount of digital noise in the image, which can degrade image quality.

ISO 800





Aperture

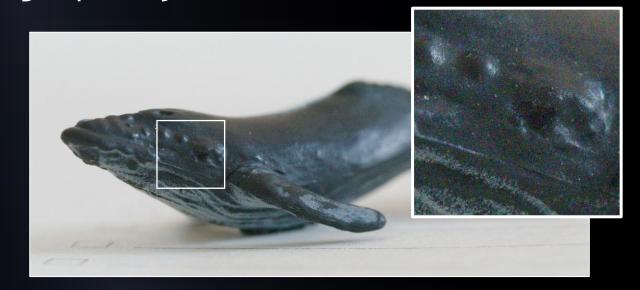




Learn the Exposure Triangle

ISO also increases the amount of digital noise in the image, which can degrade image quality.

ISO 3200





Aperture

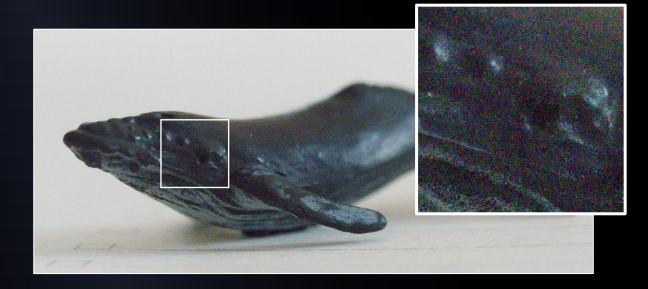




Learn the Exposure Triangle

ISO also increases the amount of digital noise in the image, which can degrade image quality.

ISO 12800





Aperture

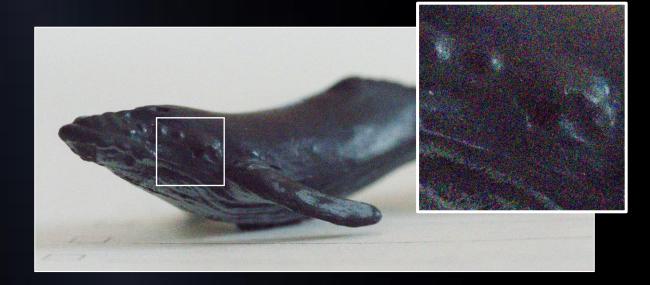




Learn the Exposure Triangle

ISO also increases the amount of digital noise in the image, which can degrade image quality.

ISO 25600





Aperture





ISO Light Sensitivity

Learn the Exposure Triangle

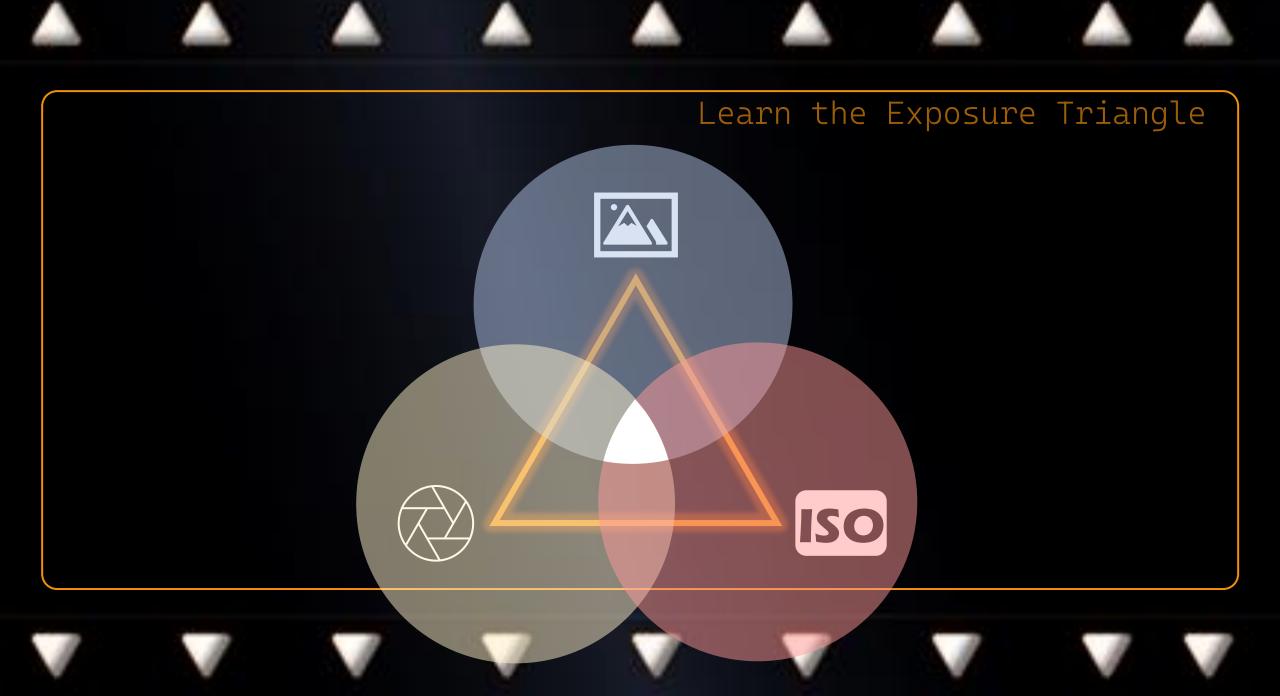
Time to grab your camera and practice!

Let's look at how to set different ISO and experiment with your camera!



Aperture





Putting it All Together

Exposure Value (EV)

Learn the Exposure Triangle

Learn the Exposure Triangle



Learn the Exposure Triangle



Learn the Exposure Triangle

$$f/4 = -1 \text{ EV} = \text{light } / 2$$

$$f/5.6 = -2 -1 0 +1 +2$$

Learn the Exposure Triangle

$$1/100s \rightarrow 1/50s = +1 EV = light x2$$

Learn the Exposure Triangle

$$1/100s \longrightarrow 1/200s = -1 EV = light /2$$

$$-2 -1 0 +1 +2$$

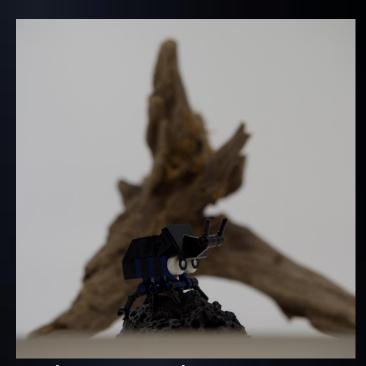
Learn the Exposure Triangle

ISO
$$200 \longrightarrow ISO 100 = +1 EV = light x2$$

Learn the Exposure Triangle

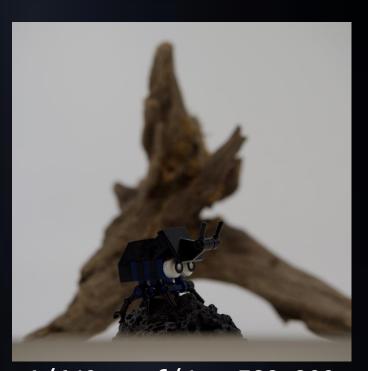
ISO
$$400 \longrightarrow ISO 200 = -1 EV = light /2$$

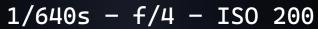


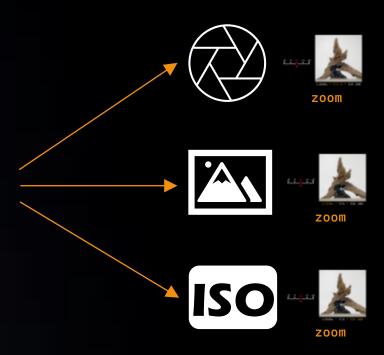


1/640s - f/4 - ISO 200



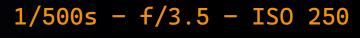






$$1/640s - f/4 - ISO 200$$







Learn the Exposure Triangle

Time to grab your camera and practice!

Let's take some pictures and see how we can play with the exposure triangle to expose them correctly!

CONCLUSION

Use manual mode and the exposure triangle to let your creativity shine!