Depth of Field (For Camera Phones)

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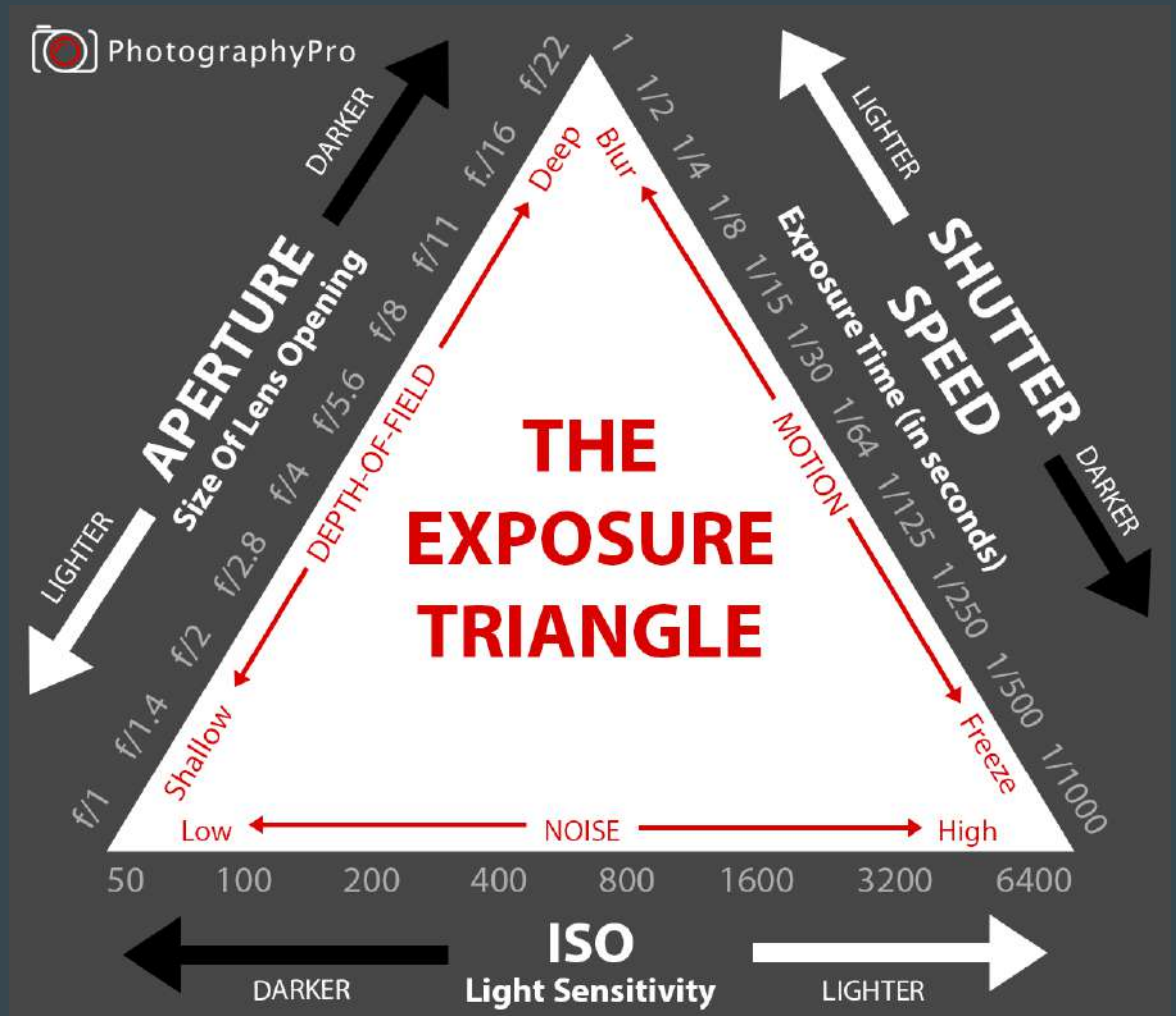
Understanding the Power of Aperture


UNDERSTANDING
APERTURE
WITH STAR WARS LEGOS



The Exposure Triangle

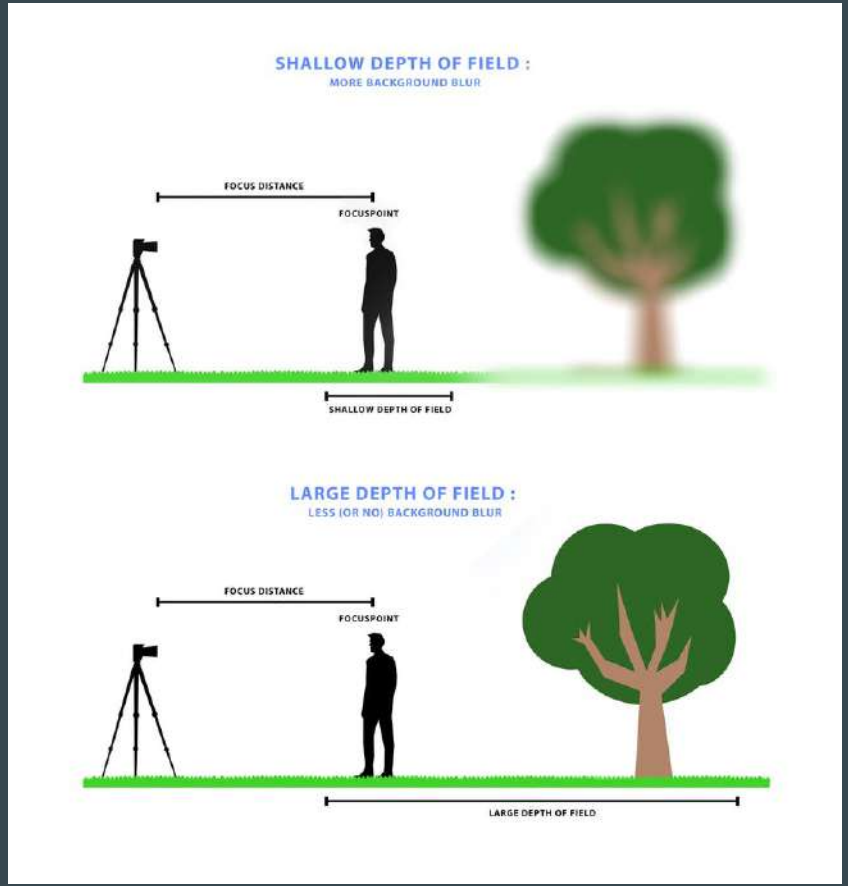
Aperture: How much light enters the lens via the size of the opening.

Shutter speed: The length of time light enters the lens measured in seconds.

ISO: How sensitive your digital image sensor is to light

What is Depth of Field?

- Depth of field refers to how blurry or sharp the background is behind and in front of the subject. If you look at the diagram to the right, you can see when the background is blurry it's referred to as shallow depth of field. When the image is sharp behind the subject, it's called large depth of field.



What can affect your Depth of Field?

1. Focal Length of Your lens
    a. Lens choice can affect your depth of field
2. Distance You Are From Subject
    a. Depending on how close or far you are from your subject, this can affect the depth of field
3. Aperture/ F-Stop
    a. Your aperture will determine how much light enters into your camera, as well as the depth of field.
4. How Far The subject is away from background

Focal Length

- When you shoot with a long lens, like a 200 mm, you will be able to create impressive depth of field. The opposite happens when you shoot with a 50 mm and your results are not as dramatic. going to be dramatic.

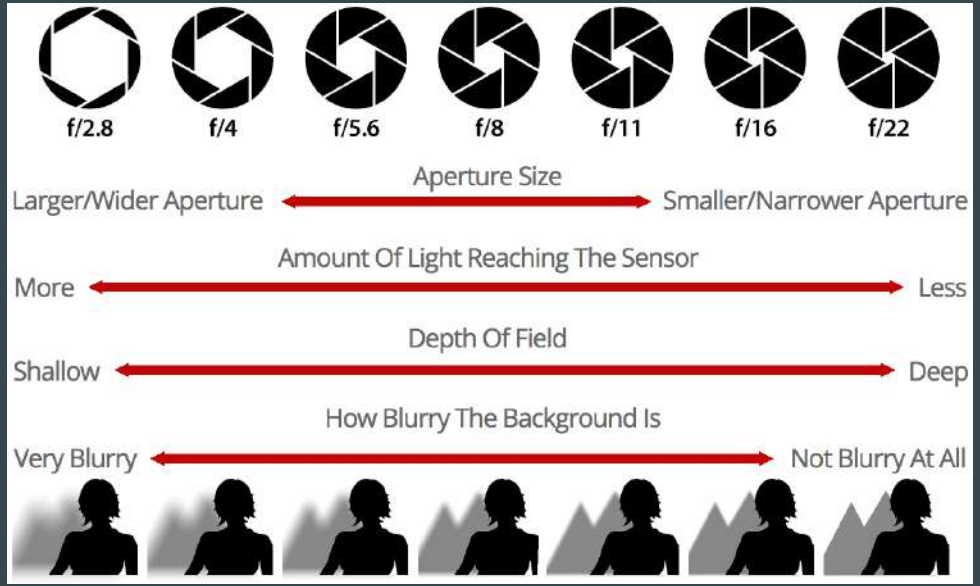
Distance From Subject

- When you get physically closer to your subject, you can blur out your background even more.
- And the opposite happens when you step farther away.

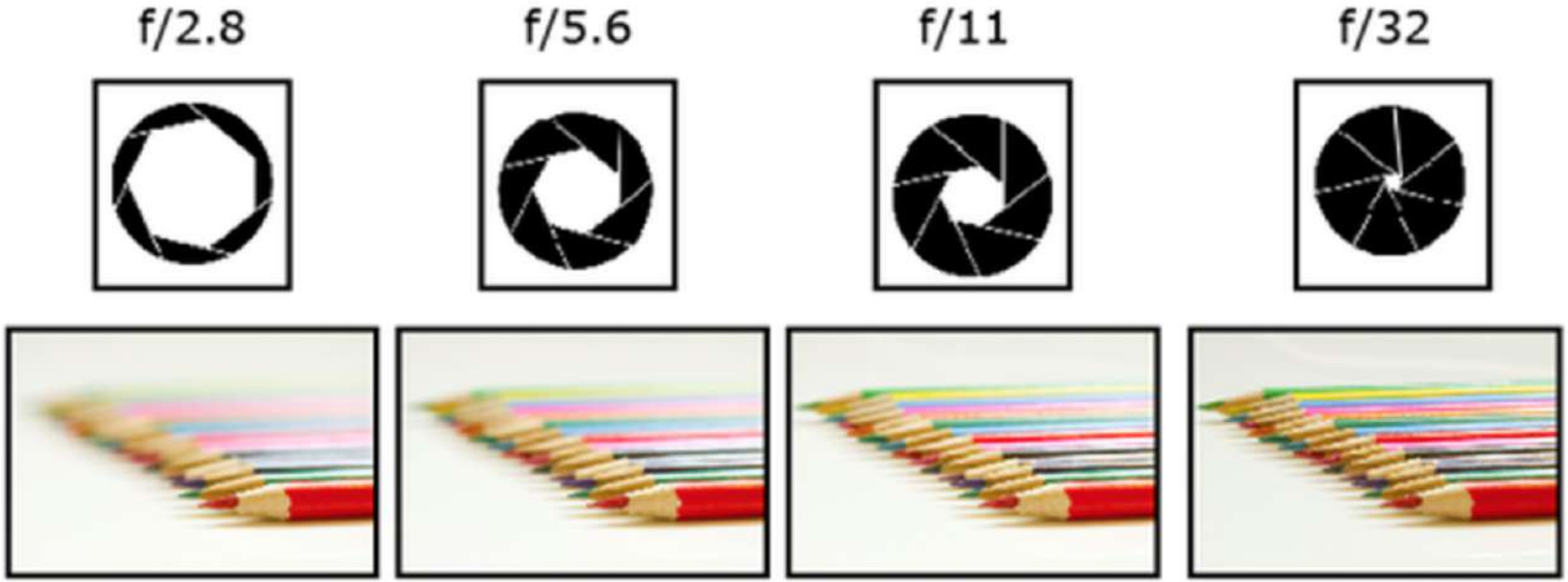
Adjusting Aperture

I want you to think of F-stop numbers like a piece of a pie. If you have f/8 and f/22 they are fractions, or slices of a pie. So which one is bigger? Which allows more light in?

- F 2.8 (Fully open lens with low F-stop number) = Shallow Depth of Field/Blurry Background
- F 22 (Closed down lens with high F-stop number) = Deep Depth of Field/ Everything is in focus



Large aperture = shallow depth of field / Small aperture = deep dof

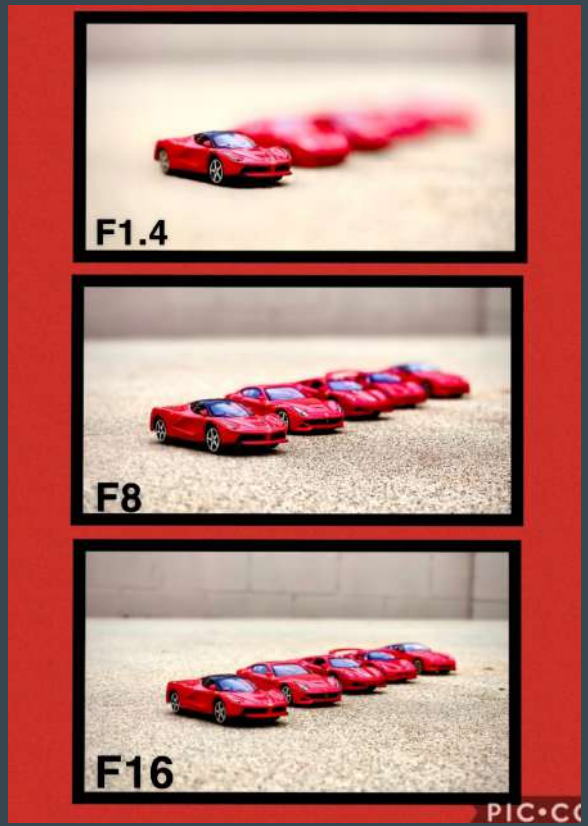


f/22 - small aperture
Deep Depth of Field

f/2.8 - large aperture
Shallow Depth of Field

Let's Practice Depth of Field

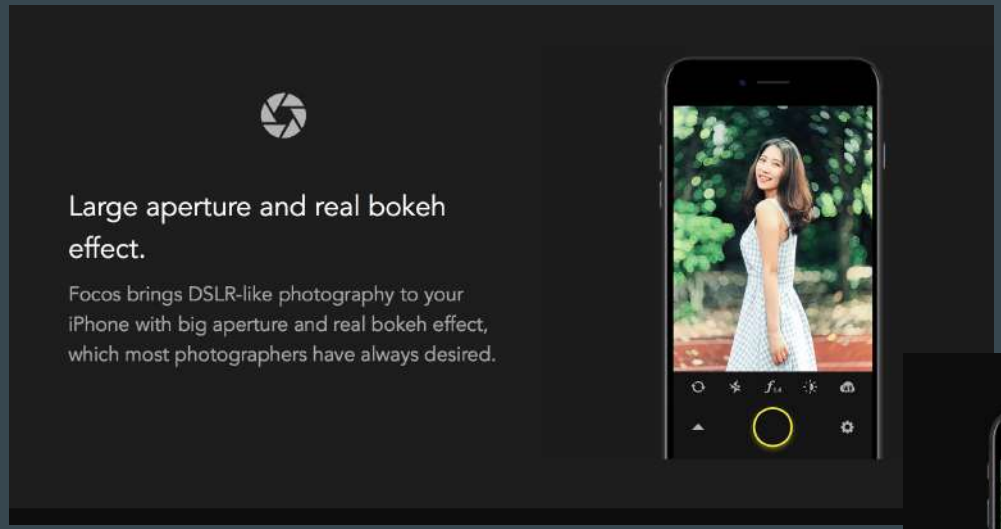
- Choose 3-5 items and place them on a table.
- It's important that your items are staggered, so some are close to you and some are further away.
- If the items are horizontal in front of you, it will not work.

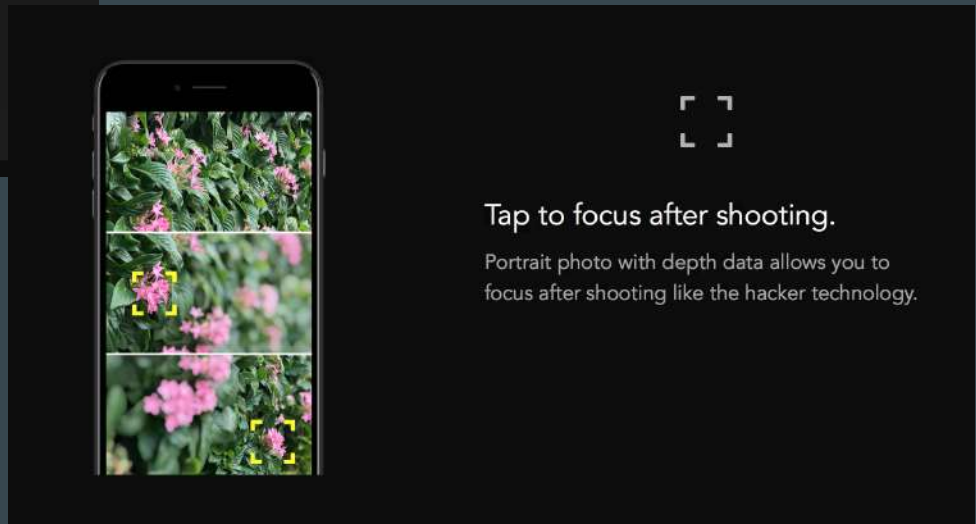


iPhones (X and Newer): Use Portrait

- Choose a well lit location and slide over to Portrait Mode
- Your subject has to be 2-8 feet away from camera. Your camera will say to move in closer or step back to achieve effect.
- When you are in the correct distance your screen will say natural light and you will know you are in your sweet spot.
- Click on f symbol in upper right corner (iphone 11 and newer and select desired f-stop.
- Android users and newer iPhone people can use Depth Control to change the strength of your background blur.

FOCUS app for those of you who don’t have portrait mode





How to Use the Focos App