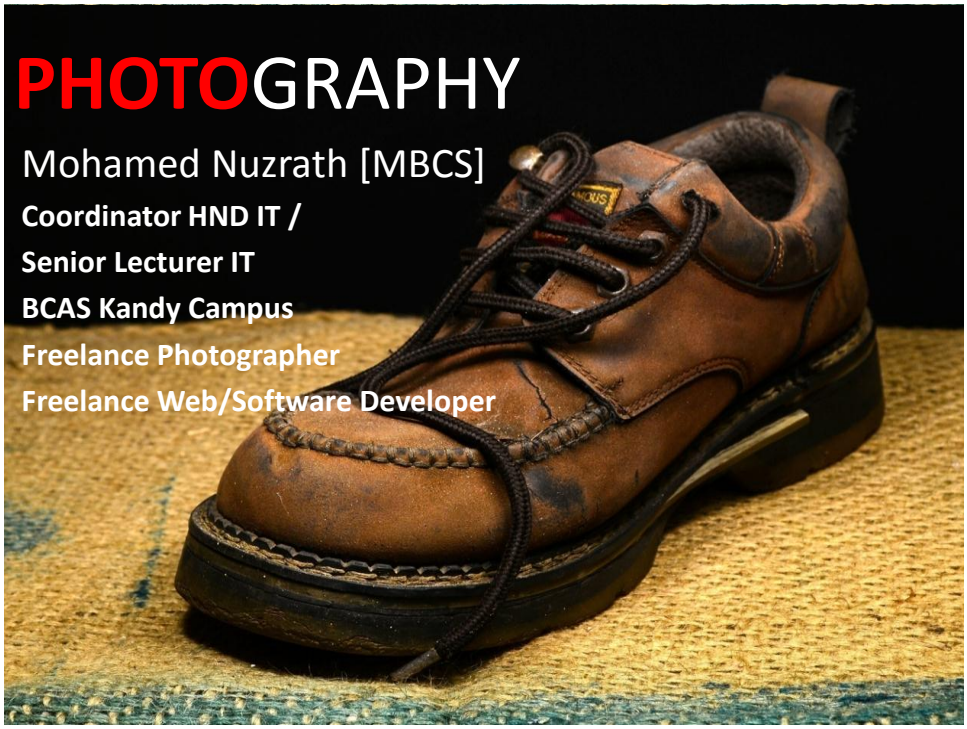
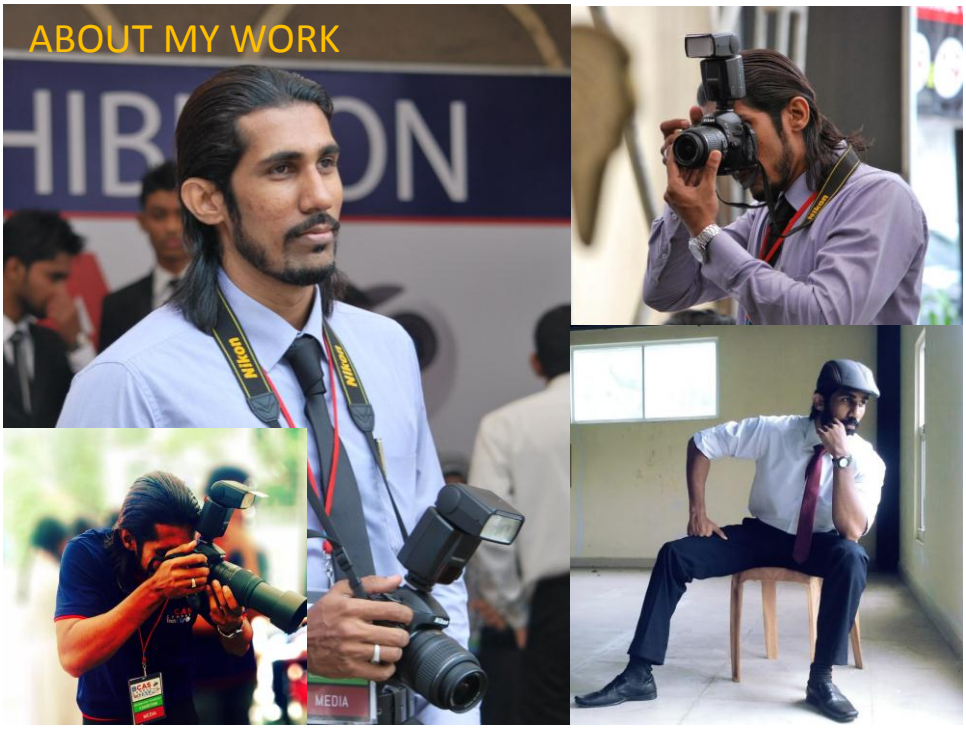


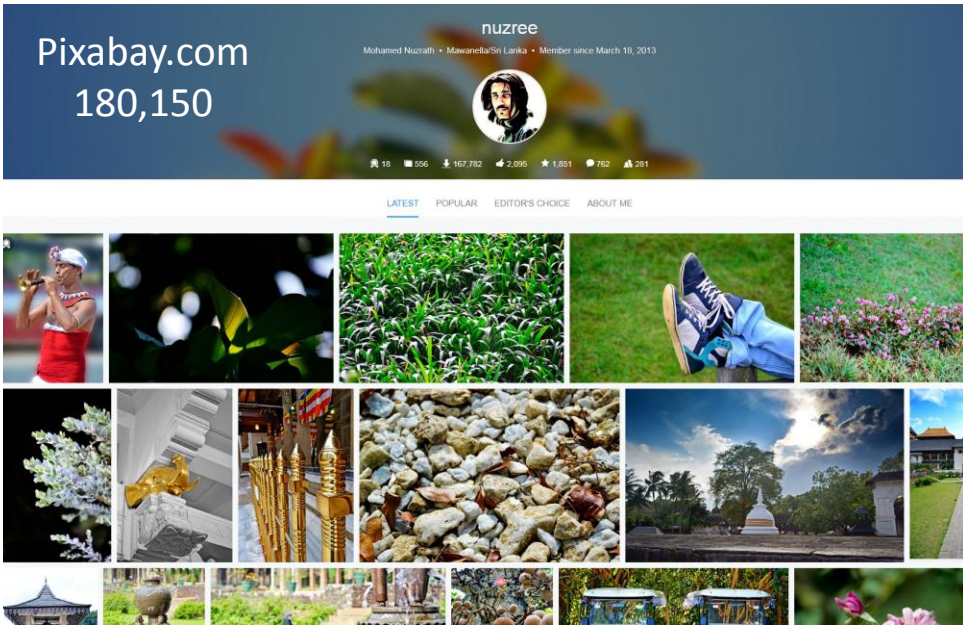
PHOTOGRAPHY

PHOTO - Light

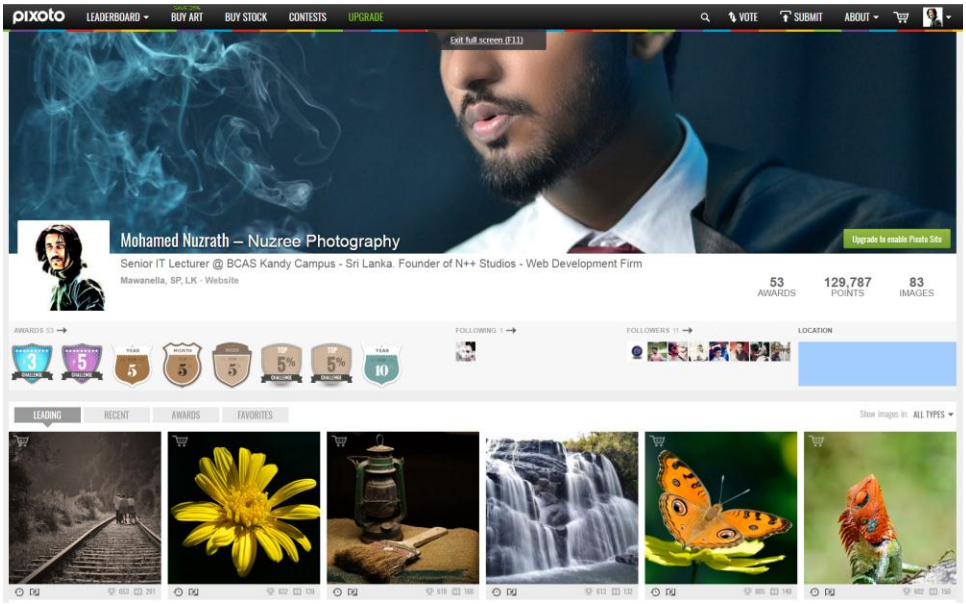
GRAPHY – Drawing

PHOTOGRAPHY – Drawing with Light





http://www.pixabay.com/users/nuzree



https://www.pixoto.com/nuzree

http://www.facebook.com/nuzryphotography

S-Ion Water for Life Competition 2016

Contents..

- Introduction to Photography
- Types of Cameras
- Types of Lenses and other Equipments
- Photography Techniques
- Composition
- Exposing a Photograph
- What is Shutter speed, Aperture, and ISO
- Rule of Thirds
- Leading lines
- Macro / Closup Photography
- Shooting Portraits
- Flash Photography
- And more...

Types of Cameras

Film Camera

Digital Camera

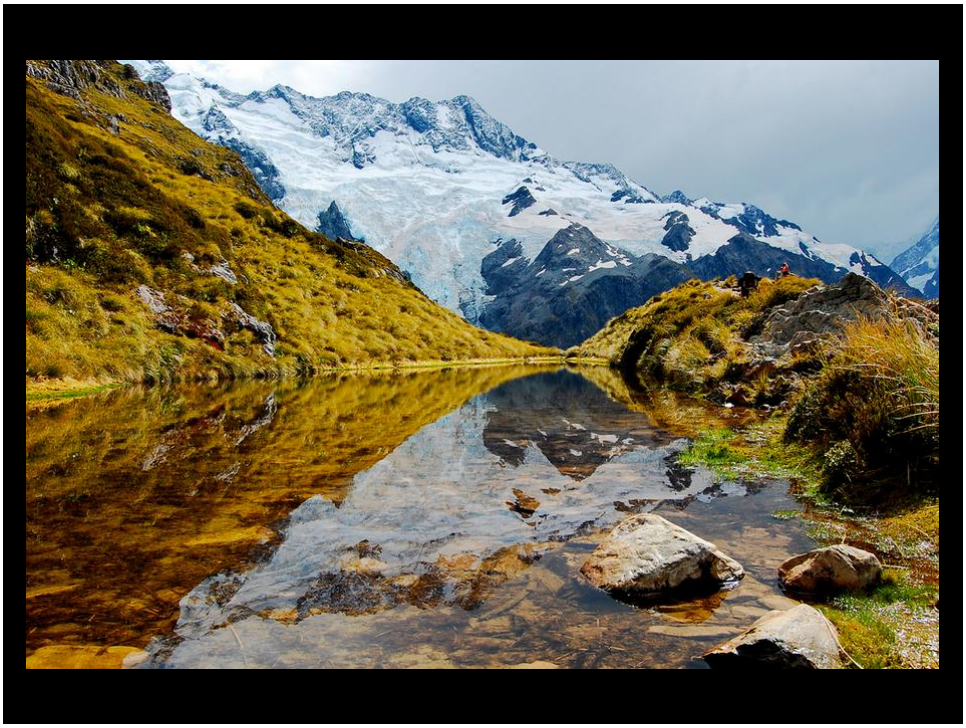
Point and Shoot

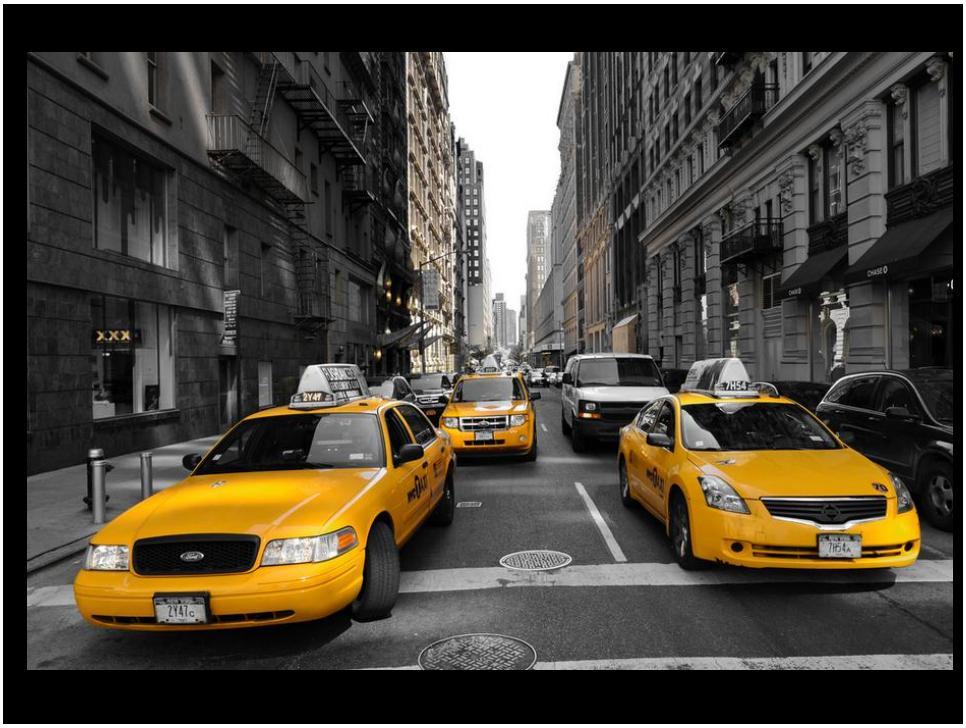
Bridge Camera

DSLR

Lenses : kit Lens

18-55 AS-S Nikkor F/3.5-5.6 VR Lens





Lens : Telephoto/Zoom Lens

55-200mm AS-S Nikkor F/4-5.6 VR Lens

55-300mm AS-S Nikkor F/4-5.6 VR Lens

Lens: Telephoto/Zoom Lens

500mm Nikkor F/4 Super Zoom Lens

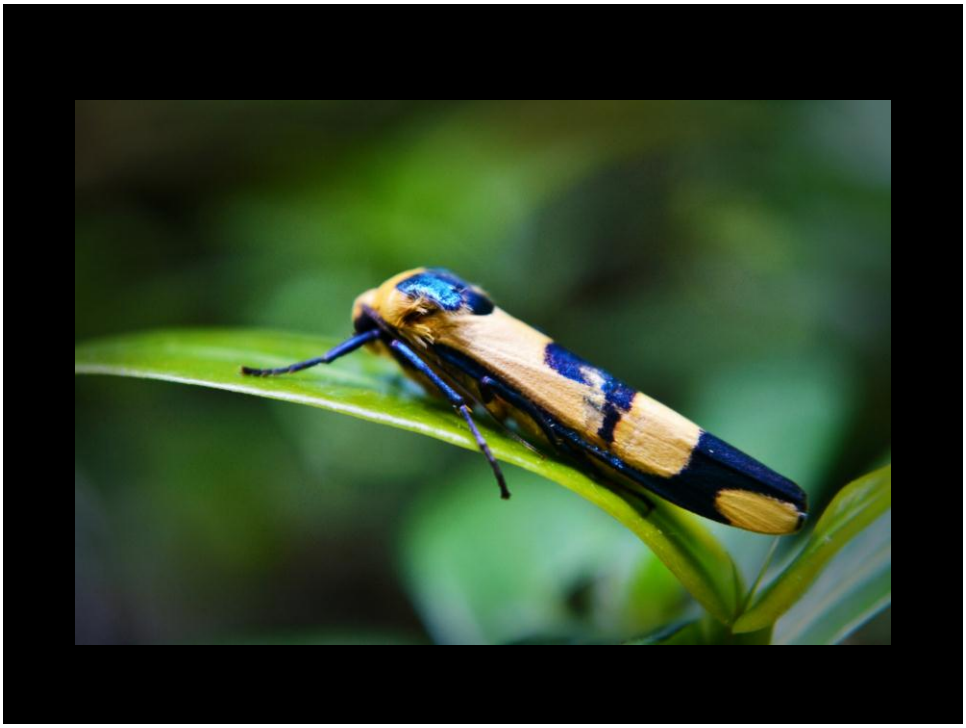
Lens: Prime Lens

35mm AF-S NIKKOR F/1.8 G

50mm AF NIKKOR F/1.8 D

Sample Shots

Lens: Macro



Camera Modes

Working with Command Dial

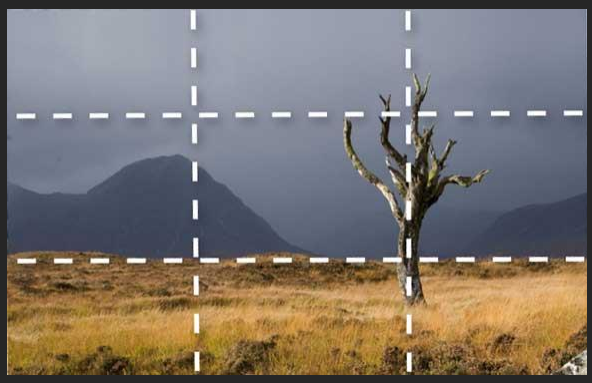
Nikon

Canon

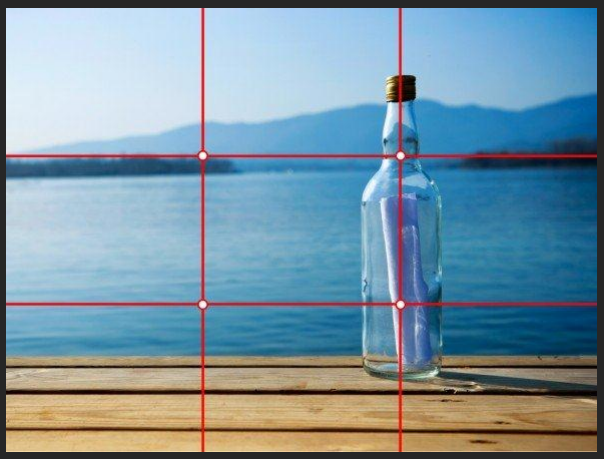
Composition

Ideas and Techniques

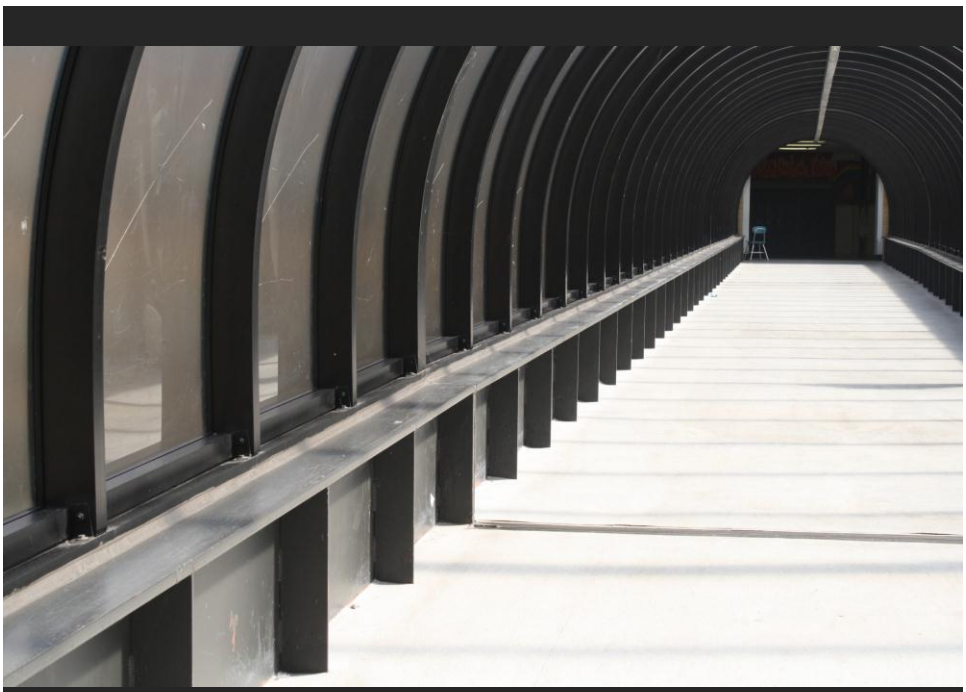
Rule of Thirds



Rule of Thirds



Leading Lines

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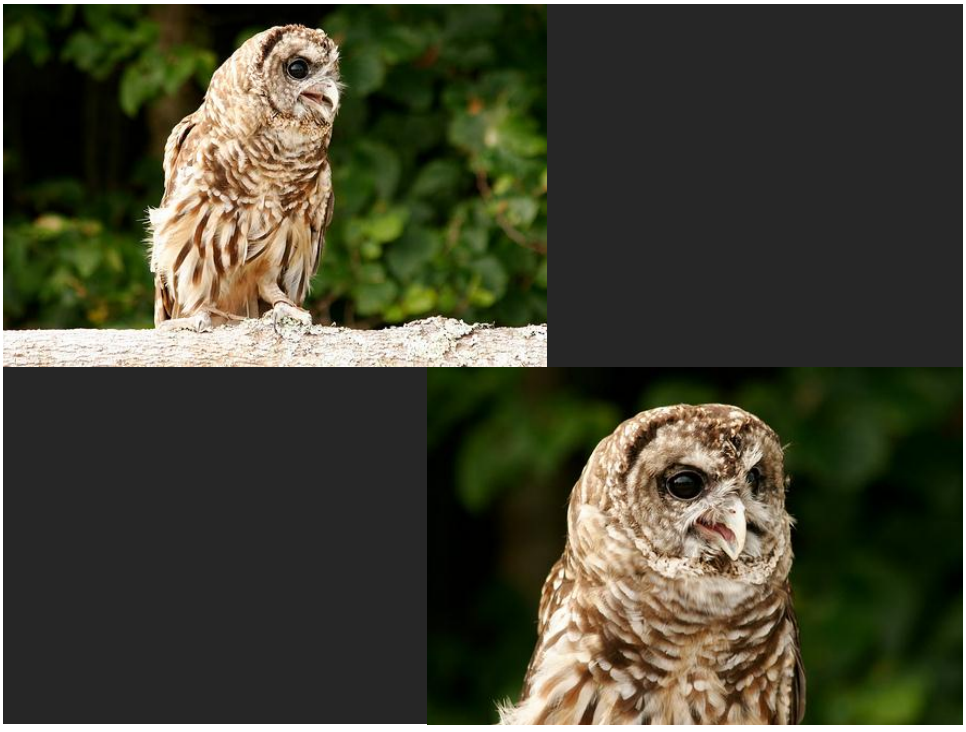
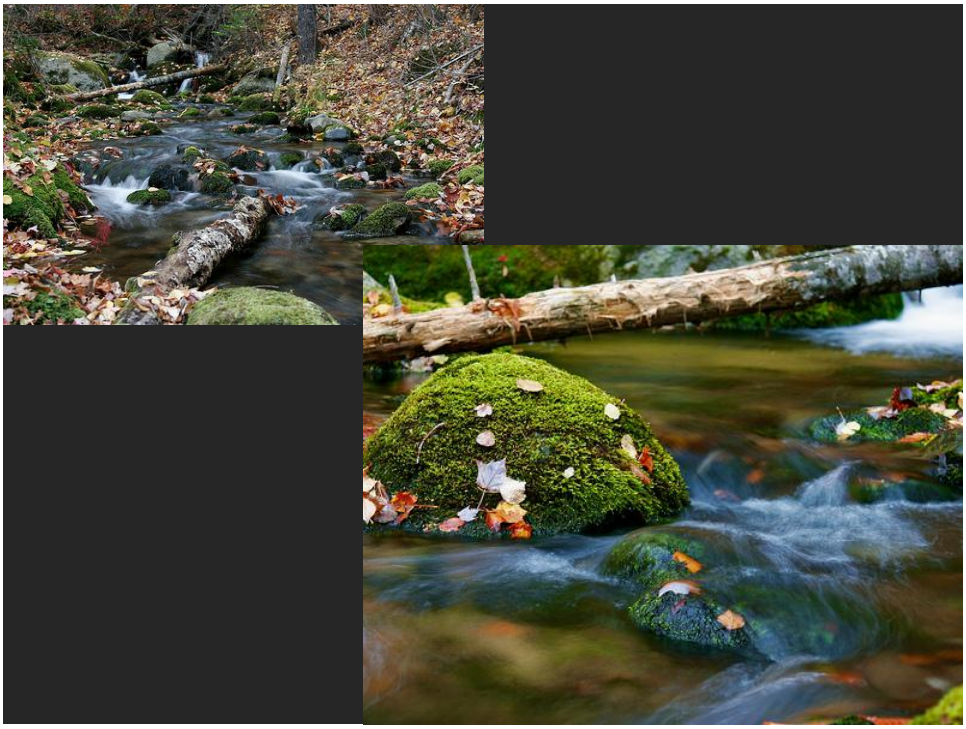
FunkyTown
photography

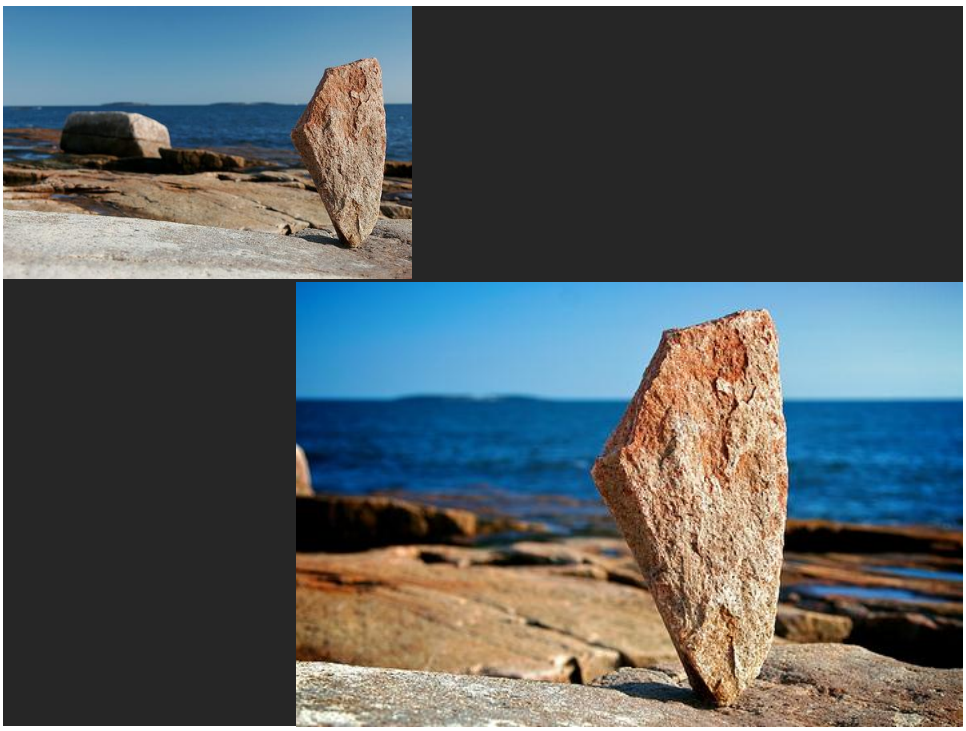
Fill the Frame



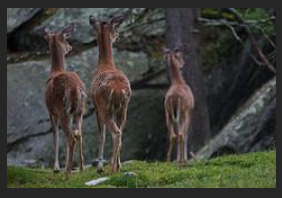


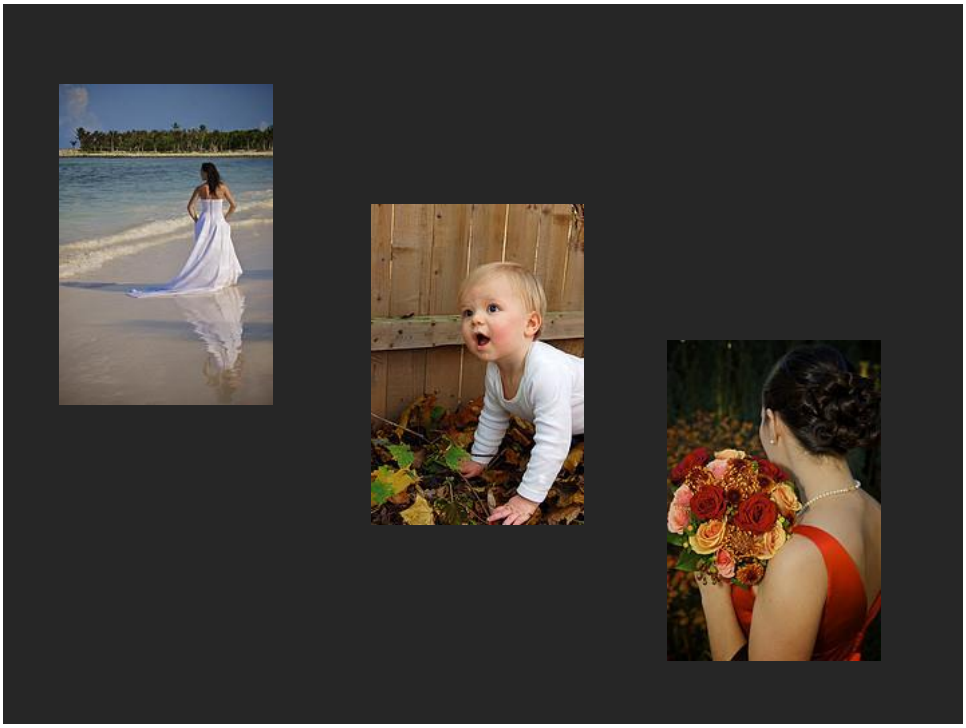







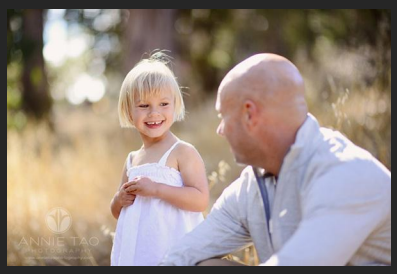
Leave Space





Foreground & Framing

Different Perspectives



How you shoot a scene determines what kind of story you want to tell and what kind of mood you want viewers to feel when they look at a photo. The power of perspective is beyond the consideration of your photography subjects; it is about the angle of your camera, your proximity to the subjects and what you include in the frame that plays an important role in your final image.

Shoot from low position straight on

Specially when photographing children it's a better idea get to their level.

Shoot from low position straight on

Specially when photographing children it's a better idea get to their level.

Shoot down

to get a sense of scale (that the child is small)

Shoot upwards

to turn tall scenery, like trees or cityscape, into the backdrop

Shoot Wide

to show the environment

Shoot Close up

to give an intimate feel or to highlight a particular action or detail

Include Reflections

to give an additional dimension to an image

Include Reflections

to give an additional dimension to an image

Include Reflections

to give an additional dimension to an image

Shoot Behind things

to make it feel like you're peeking into a private moment

Shoot Behind things

to make it feel like you're peeking into a private moment

Before you press the Shutter

Before you press the shutter, take a moment to think about how you want your subject to be perceived in the image. Is there anything you want to highlight? A story you want to tell?

You don't need fancy camera equipment or a bunch of expensive lenses to create different perspectives. You just need creativity and the ability to move around…and BAM! You have it all.

The Basics of Exposure

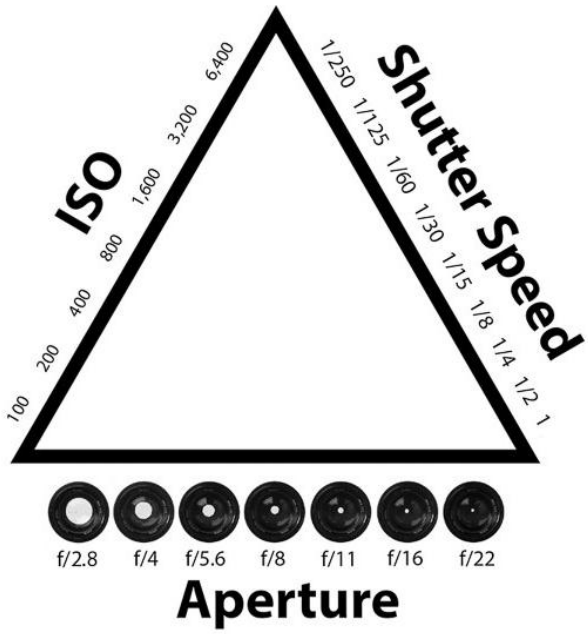
Learning about Exposure – The Exposure Triangle

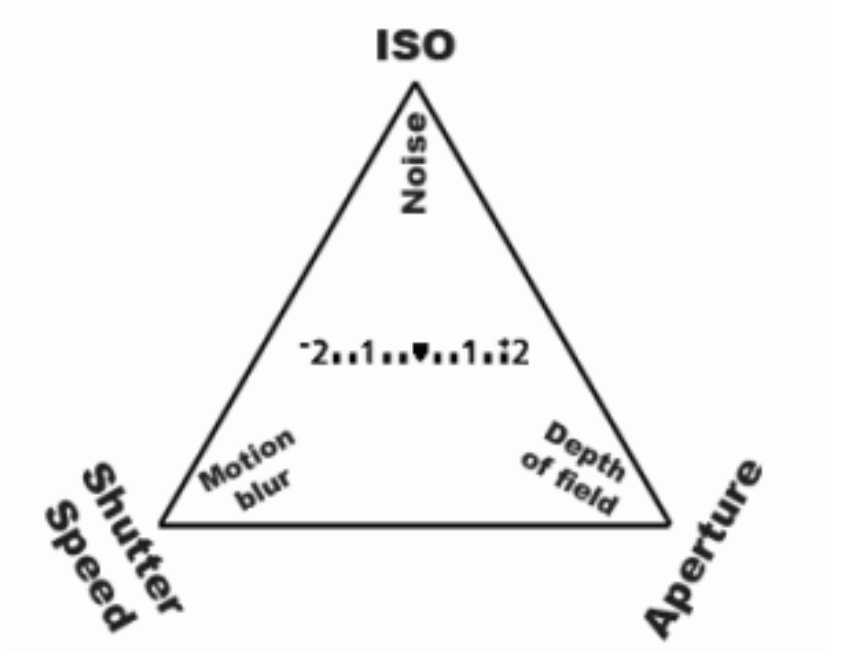
Introduction to ISO in Digital Photography

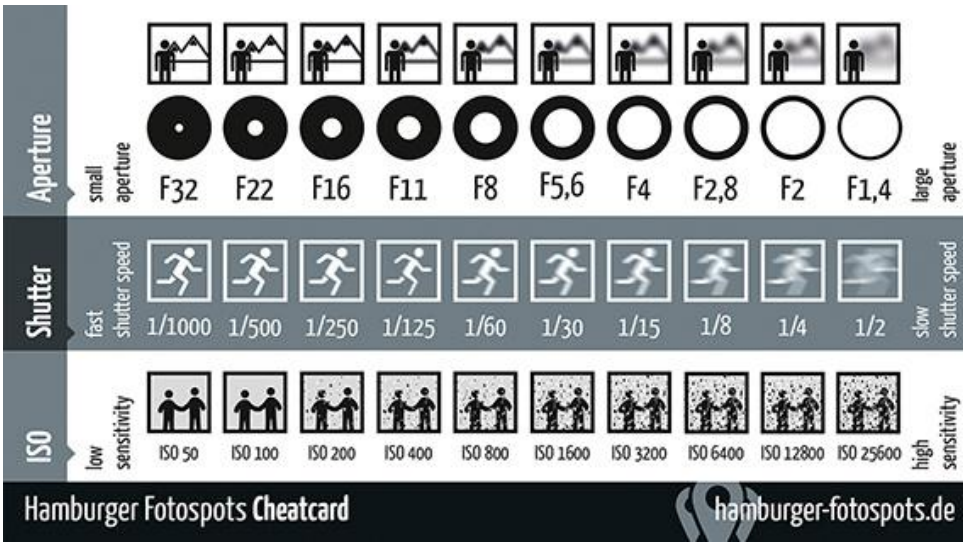
Introduction to Shutter Speed in Digital Photography

Introduction to Aperture in Digital Photography

The Exposure Triangle




ISO
Noise
-2..1..0..1..2
Motion blur
Depth of field
Shutter Speed
Aperture


Aperture
small aperture
F32 F22 F16 F11 F8 F5,6 F4 F2,8 F2 F1,4
large aperture
Shutter
fast shutter speed
1/1000 1/500 1/250 1/125 1/60 1/30 1/15 1/8 1/4 1/2
slow shutter speed
ISO
low sensitivity
ISO 50 ISO 100 ISO 200 ISO 400 ISO 800 ISO 1600 ISO 3200 ISO 6400 ISO 12800 ISO 25600
high sensitivity
Hamburger Fotospots Cheatcard
hamburger-fotospots.de

The Three Elements are

ISO

the measure of a digital camera sensor's sensitivity to light

Aperture

the size of the opening in the lens when a picture is taken

Shutter Speed

the amount of time that the shutter is open

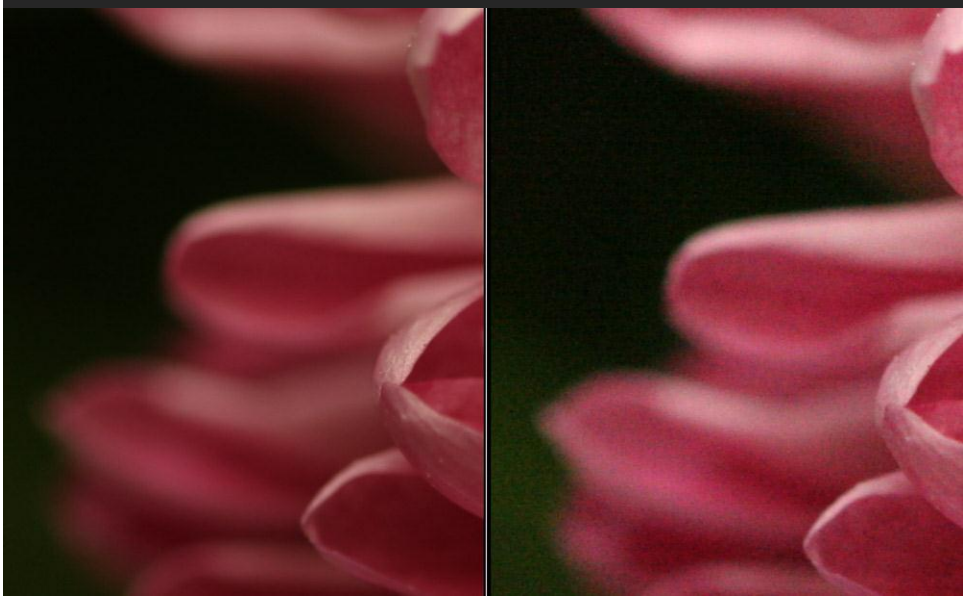
ISO Settings in a Digital Camera

In traditional (film) photography ISO (or ASA) was the indication of how sensitive a film was to light. It was measured in numbers (you've probably seen them on films – 100, 200, 400, 800 etc). The lower the number the lower the sensitivity of the film and the finer the grain in the shots you're taking.

In Digital Photography ISO measures the sensitivity of the image sensor. The same principles apply as in film photography – the lower the number the less sensitive your camera is to light and the finer the grain.

Higher ISO settings are generally used in darker situations to get faster shutter speeds. For example an indoor sports event when you want to freeze the action in lower light. However the higher the ISO you choose the noisier shots you will get. I'll illustrate this below with two enlargements of shots that I just took – the one on the left is taken at 100 ISO and the one of the right at 3200 ISO

ISO Settings in a Digital Camera



ISO Settings in a Digital Camera

100 ISO is generally accepted as 'normal' and will give you lovely crisp shots (little noise/grain).

Most people tend to keep their digital cameras in 'Auto Mode' where the camera selects the appropriate ISO setting depending upon the conditions you're shooting in (it will try to keep it as low as possible) but most cameras also give you the opportunity to select your own ISO also.

When you do override your camera and choose a specific ISO you'll notice that it impacts the aperture and shutter speed needed for a well exposed shot. For example – if you bumped your ISO up from 100 to 400 you'll notice that you can shoot at higher shutter speeds and/or smaller apertures.

ISO before choosing ask yourself

Light – Is the subject well lit?

Grain – Do I want a grainy shot or one without noise?

Tripod – Am I using a tripod?

Moving Subject – Is my subject moving or stationary?

Shutter Speed

What is Shutter Speed?

As I've written elsewhere, defined most basically – **shutter speed is 'the amount of time that the shutter is open'**.

In film photography it was the length of time that the film was exposed to the scene you're photographing and similarly in digital photography shutter speed is the length of time that your image sensor 'sees' the scene you're attempting to capture.

Shutter Speed

Shutter speed is measured in seconds

or in most cases fractions of seconds. The bigger the denominator the faster the speed (ie 1/1000 is much faster than 1/30).

If you're using a slow shutter speed (anything slower than 1/60) you will need to either use a tripod or some some type of image stabilization (more and more cameras are coming with this built in).

Shutter Speed

Shutter speeds available to you on your camera will usually double (approximately) with each setting. As a result you'll usually have the options for the following shutter speeds – 1/500, 1/250, 1/125, 1/60, 1/30, 1/15, 1/8 etc. This 'doubling' is handy to keep in mind as aperture settings also double the amount of light that is let in – as a result increasing shutter speed by one stop and decreasing aperture by one stop should give you similar exposure levels

Shutter Speed

Some cameras also give you the option for very slow shutter speeds that are not fractions of seconds but are measured in seconds (for example 1 second, 10 seconds, 30 seconds etc). These are used in very low light situations, when you're going after special effects and/or when you're trying to capture a lot of movement in a shot. Some cameras also give you the option to shoot in 'B' (or 'Bulb') mode. Bulb mode lets you keep the shutter open for as long as you hold it down.

Shutter Speed

When considering what shutter speed to use in an image you should always ask yourself whether anything in your scene is moving and how you'd like to capture that movement. If there is movement in your scene you have the choice of either freezing the movement (so it looks still) or letting the moving object intentionally blur (giving it a sense of movement).

Shutter Speed

To freeze movement in an image (like in the surfing shot above) you'll want to choose a faster shutter speed and to let the movement blur you'll want to choose a slower shutter speed. The actual speeds you should choose will vary depending upon the speed of the subject in your shot and how much you want it to be blurred.

Shutter Speed

Focal Length and Shutter Speed - another thing to consider when choosing shutter speed is the focal length of the lens you're using. Longer focal lengths will accentuate the amount of camera shake you have and so you'll need to choose a faster shutter speed (unless you have image stabilization in your lens or camera). The 'rule' of thumb to use with focal length in non image stabilized situations) is to choose a shutter speed with a denominator that is larger than the focal length of the lens. For example if you have a lens that is 50mm 1/60th is probably ok but if you have a 200mm lens you'll probably want to shoot at around 1/250.

Aperture in Digital Photography

What is Aperture?

Put most simply – Aperture is 'the opening in the lens.'

When you hit the shutter release button of your camera a hole opens up that allows your cameras image sensor to catch a glimpse of the scene you're wanting to capture. The aperture that you set impacts the size of that hole. The larger the hole the more light that gets in – the smaller the hole the less light.

Aperture in Digital Photography

Aperture is measured in 'f-stops'. You'll often see them referred to here at Digital Photography School as f/number – for example f/2.8, f/4, f/5.6,f/8,f/22 etc. Moving from one f-stop to the next doubles or halves the size of the amount of opening in your lens (and the amount of light getting through). Keep in mind that a change in shutter speed from one stop to the next doubles or halves the amount of light that gets in also – this means if you increase one and decrease the other you let the same amount of light in – very handy to keep in mind).

Aperture in Digital Photography

One thing that causes a lot of new photographers confusion is that large apertures (where lots of light gets through) are given f/stop smaller numbers and smaller apertures (where less light gets through) have larger f-stop numbers. So f/2.8 is in fact a much larger aperture than f/22. It seems the wrong way around when you first hear it but you'll get the hang of it.

Aperture in Digital Photography

Depth of Field and Aperture

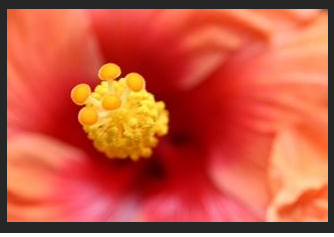
There are a number of results of changing the aperture of your shots that you'll want to keep in mind as you consider your setting but the most noticeable one will be the depth of field that your shot will have.

Aperture in Digital Photography

Depth of Field (DOF) is that amount of your shot that will be in focus. **Large depth of field** means that most of your image will be in focus whether it's close to your camera or far away (like the picture to the left where both the foreground and background are largely in focus – taken with an aperture of f/22).

Aperture in Digital Photography

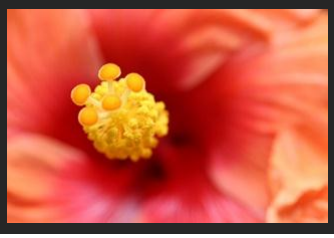
Small (or shallow) depth of field means that only part of the image will be in focus and the rest will be fuzzy (like in the flower). You'll see in it that the tip of the yellow stems are in focus but even though they are only 1cm or so behind them that the petals are out of focus. This is a very shallow depth of field and was taken with an aperture of f/4.5).



Aperture in Digital Photography

Aperture has a big impact upon depth of field. Large aperture (remember it's a smaller number) will decrease depth of field while small aperture (larger numbers) will give you larger depth of field.

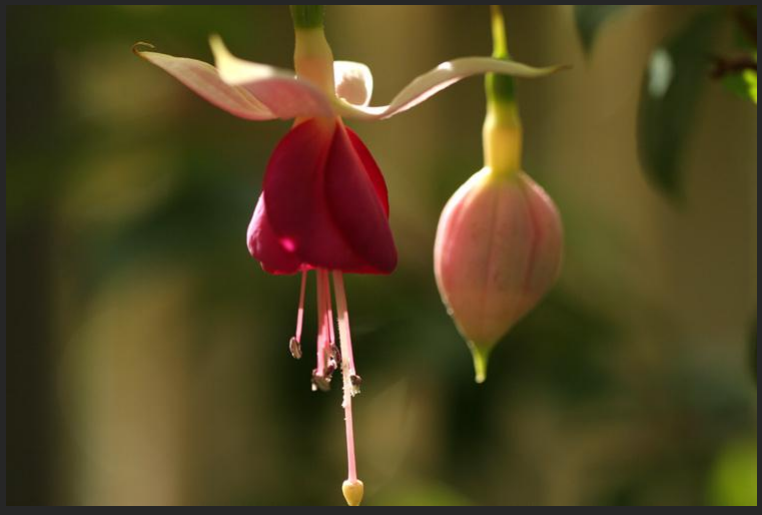
It can be a little confusing at first but the you can remember it as, small numbers mean small DOF and large numbers mean large DOF.



Aperture in Digital Photography

f/22

Aperture in Digital Photography



f/2.8

Aperture in Digital Photography

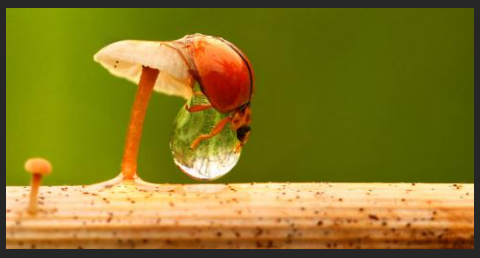
Some styles of photography require large depths of field (and small Apertures)

For example in most landscape photography you'll see small aperture settings (large numbers) selected by photographers. This ensures that from the foreground to the horizon is relatively in focus.

On the other hand in portrait photography it can be very handy to have your subject perfectly in focus but to have a nice blurry background in order to ensure that your subject is the main focal point and that other elements in the shot are not distracting. In this case you'd choose a large aperture (small number) to ensure a shallow depth of field.

Aperture in Digital Photography

Macro photographers tend to be big users of large apertures to ensure that the element of their subject that they are focusing in on totally captures the attention of the viewer of their images while the rest of the image is completely thrown out of focus



In future you will be…