The Beginner's Guide to Photography Terminology

by Chris Gampat

There are a couple of terms that everyone really needs to learn first before they get into photography and they are the most basic of terminology that is essential.

Rule of Thirds: This is the basic idea of composition. It is essentially dividing the image up into three horizontal and vertical sections.

These lines are available to see on most point-and-shoot cameras. On a DSLR, you can either change the filter in your eyepiece (viewfinder) or imagine them.

Depending on who you ask (and I've been taught both ways by my mentors and in internships) you can either use the lines to ensure that your subjects (those you are photographing) are not centered or that they are centered.

For more interesting images, don't center your subjects. However, there are times when it really is essential to do that.

Shutter Speed: This is how long your camera's shutter stays open for and it can be read on either the back of your screen or within the viewfinder. It is typically a fraction or a whole number.

For example:

- ► 1/15 = a fifteenth of a second
- ▶ 1/1000= a thousandth of a second

- ▶ 1"= 1 second
- ▶ 15" = fifteen seconds

Here are the basic rules to follow:

- The longer the shutter speed the more motion that will be captured and the stiller you need to remain. This is great for capturing nighttime scenes.
- The faster the shutter speed the less motion will be captured. This is great for capturing fast moving objects like sports action.
- On your camera, this can be seen with the S mode.

Aperture: This is also known as an F stop. It controls how much of your image is in focus or not (IE what is clearly and sharply seen and what is blurred out.) It also controls how much light comes into the lens of your camera and hits the sensor (the equivalent of film.)

In general:

- ▶ f1.4 = Enables high shutter speeds, not much is in focus.
- ▶ f2.8 = Enables almost as high shutter speeds, more is in focus. Great for portraits.
- ▶ f11 = Needs slower shutter speeds, much more is in focus.
- ▶ f22 = Needs the slowest of shutter speeds. Everything you point your lens at should be in focus. Best used with a flash unless there is tons of available bright light.

On your camera this is also known as AV mode.

Depth of Field: This is what is the range of distance within the subject that is acceptably and sharply in focus. It can be controlled using your F stops.

ISO: Light sensitivity of your camera's sensor. The higher the ISO, the more sensitive your camera will be to light and the grainier your images will be. The lower the ISO, the less sensitive the camera will be to light and the less grainier your images. Higher ISOs allow for faster shutter speeds.

- **ISO 100** = great for daylight use, no image grain.
- **ISO 400** = great for twilight use, a bit more grain.
- ISO 1600 = much more suited towards low light or high action where you need to stop fast movement.
- **ISO 6400** = Even better suited to low light and fast action, but delivers grainy images.

Manual: A shooting mode on your camera that enables you to control every aspect of shooting. You can manipulate the shutter speeds, ISO settings, aperture settings and loads more. On your camera this is the "M" mode.

Exposure- This term is used very, very interchangeably in the photographic community. It can mean your shutter speed, a single photo and other things. Your camera has something called, "Exposure Compensation" that depending on the meter will either make your image brighter or darker.

The way it typically can work on your camera is by adjusting the shutter speed, ISO or aperture depending on what

shooting mode (manual, aperture, shutter priority or program) that you are in.

Usually, you just have to judge from the context.

Lens: The piece of glass attached to your camera. There are different types of lenses.

Prime: A fixed focal length with no zoom. They can be 50mm, 28mm 85mm etc. They typically tend to have better results depending on manufacturer and have a fixed aperture as well.

Zoom: a lens that zooms in and out. Lesser quality zooms will generally change aperture when zooming in and out depending on the range. Higher quality ones keep the same aperture throughout the zoom ranges. Once again, this depends on many different factors such as zoom range.

Lenses with a larger aperture (f1.4) are known as fast lenses. Lenses with a smaller aperture (over f4) are known as slow lenses.

Focus: This is what the camera is mainly trying to take a picture of. On a point and shoot, it is what appears in the green boxes on your camera's LCD. For a DSLR, it is literally what can be clearly and sharply seen in the depth of field. The larger your F stop (f1.8) the less will be in focus.

The out of focus area is affectionately called, "**bokeh**" and can deliver some beautiful results.

There are also different type of focusing modes:

- Macro, which is anything really, really up close. About a couple of inches or even less. (seen as a flower symbol)
- Infinity, which is for very, very far away objects. (seen as a mountain symbol)
- Normal, which is generally everything in between Macro an Infinity.

Beyond this there is also:

- Auto-focusing which lets the camera focus for you.
- Manual-focusing which enables you to do all the focusing.

There are also in-between modes depending on the type of lens and who made it. For example, Canon creates USM lenses that can auto-focus and allow you to touch it up with manual focusing.

On Olympus, it is done through the camera. For them there is:

- Single focus: Which will autofocus on one stationary subject.
- Single/Manual: Same thing but allows for manual touch up.
- Continuous focus: which will continuously focus on one spot or subject as you are moving.
- Continuous/Manual: Same thing but allows for manual touch up
- **Tracking Focus:** Which will continuously focus on one subject as it moves.

Flash: The burst of light that comes from the camera when a picture is taken. There are different types of flash. Here are just two examples.

- Fill Flash: light that will just fill in any dark spots.
- **Red Eye:** flash that will prevent red-eye from showing up.

On your camera, this is typically characterized by the lightning bolt symbol.

Shooting Speed/Mode: This

determines how many pictures (or exposures) your camera will take when the shutter is pressed down.

- **Single:** When the shutter is pressed it will take one picture. To take another picture, you need to press the shutter again.
- Continuous: When the shutter is pressed and held down it will keep taking pictures until the card fills up or the processor can't write anymore photos to the card.

On your camera, this is typically characterized by the three rectangles stacked on top of one another.

RAW: There are many different types of image files. The most common are JPEGs, which most cameras take and what you always see online. RAW is a much larger file that contains lots of information and allows for more flexible editing.

Different camera companies make different RAW files. For example: Canon is CR2, Olympus ORF, Adobe is DNG.

Think of it this way:

- Film: Negative -> Print
- ▶ Digital: RAW -> JPEG

Not all cameras have RAW shooting mode. All DSLRs do though.