

# EVERYDAY PHOTOGRAPHY

## Lesson 2 - Metering

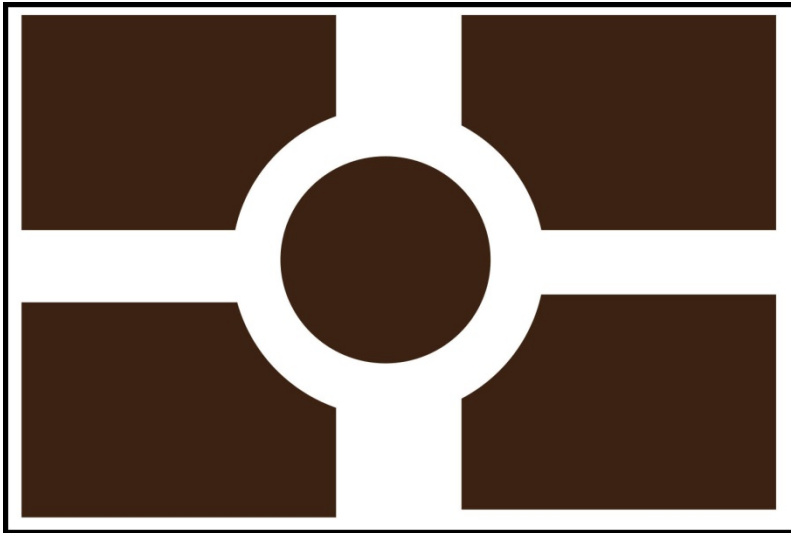
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# METERING

## What exactly is metering?

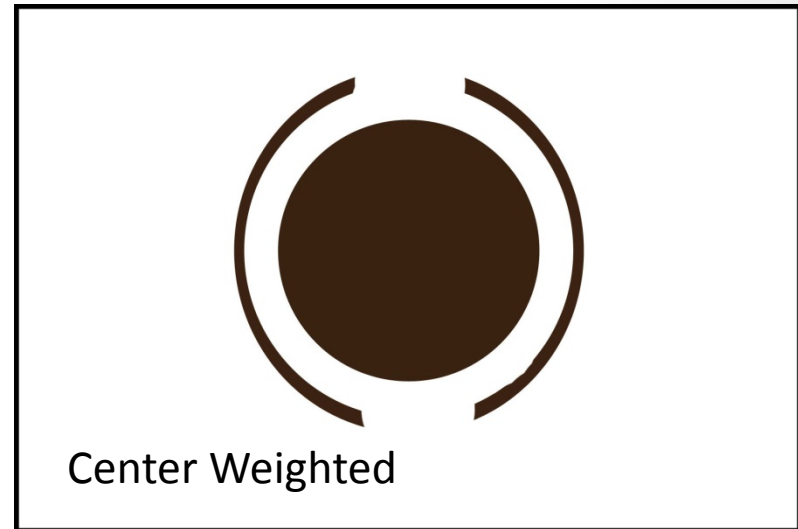
- Metering is how your camera measures light coming in thru the lens.
  - This is how aperture fits into the exposure triangle.
    - The wider the lens opening (small F#) the more light that is allowed in.
    - The narrower the lens opening (big F#) the less light that is being allowed in.
- Metering is how you will ensure your image is well exposed.
  - Underexposed = image is too dark. Histogram will lean to the left.
  - Overexposed = image is too bright. Histogram will lean to the right.

What the metering mode icons look like on most DSLR cameras.

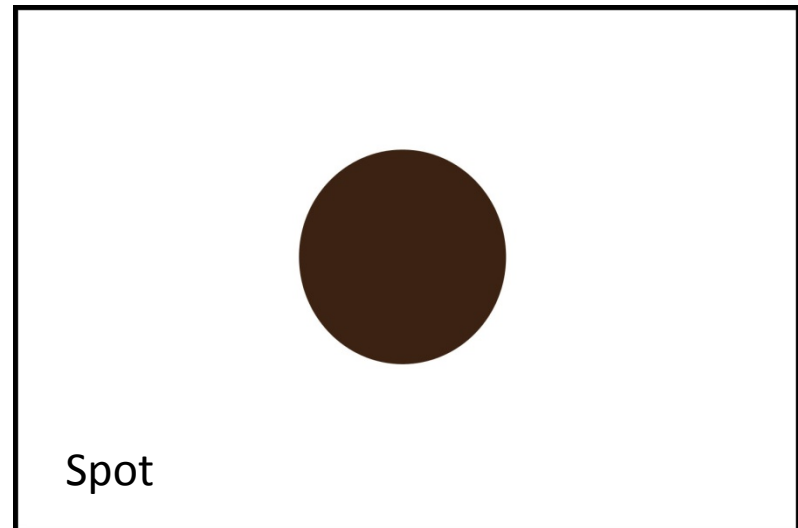


Matrix/Evaluative

There is one additional metering mode on Canon cameras – partial. This is kind of an in between spot and center-weighted.



Center Weighted



Spot

# TYPES OF METERING MODES

## Three main types of metering modes:

- Matrix (Evaluative) – Usually the default mode. The camera evaluates light from multiple locations in the scene.
  - Good time to use Matrix – landscape pictures.
- Center Weighted – The camera puts most of the emphasis on the light reading of the center of the picture.
  - Good time to use Center Weighted – everyday shots with even lighting.
- Spot – The camera reads the light in only the one chosen spot in an image.
  - Good time to use Spot – backlight subjects or areas with uneven lighting.



Aperture: F2 ~ ISO: 1600 ~ SS: 1/2500

Taken using matrix metering. Notice how the Glass Plus bottle is underexposed but the background looks normal?



Aperture: F2 ~ ISO:1600 ~ SS: 1/1250

Taken using spot metering. Notice how the Glass Plus bottle is well exposed but the background is brighter?



Aperture: F2 ~ ISO: 1600 ~ SS: 1/640

Taken using Matrix mode. Notice how dark the bag is but how well exposed the background looks.

Also note how fast the shutter speed is for that shot. LESS light was needed (according to the camera) so the shutter didn't stay open very long.

Aperture: F2 ~ ISO: 1600 ~ SS: 1/200

Taken using Spot mode. Notice that the bag (front) is well exposed but that the background is blown.

Note that the shutter speed slowed down because when I metered, it required the shutter to stay open longer to allow in more light.



# THE MECHANICS OF METERING

## 1<sup>st</sup> - Evaluate your light

- Is it even, meaning the light is consistent all around?
- Are you in the shade with bright light in the background?
- Is it the “Golden Hour” and your subject is in front of the setting sun?

## 2<sup>nd</sup> – Consider your subject

- Are you capturing shots of a busy toddler? Using spot metering will be hard because they will not stay still for you to meter.

## 3<sup>rd</sup> – Pick your mode

- Busy subject = Center weighted (best) or Matrix
- Back light = Spot (best, but if busy toddler use Center Weighted)

## 4<sup>th</sup> – Pick your ISO and aperture

- These may need to change after metering.

# THE MECHANICS OF METERING - 2

## 5<sup>th</sup> – Meter and take the shot

- With Matrix or Center Weighted:
  - Look through the view finder and depress the shutter half-way in order to have the camera evaluate the light.
  - Then use your back scroll wheel to get the line graph/meter balanced out.
  - Compose your shot and focus on your subject's face or eye (depending on how close you are to them) and press the shutter.
  - Meter should continue to show a well balanced/exposed graph.
- With Spot:
  - Look through the view finder and depress the shutter half-way in order to have the camera evaluate the light.
  - Then use your back scroll wheel to get the line graph/meter balanced out.
  - Compose your shot and focus on your subject's face or eye (depending on how close you are to them) and press the shutter.
  - Meter will NOT look right when you go to focus on your subject. Usually it will show that you are way overexposed. Ignore it and take the picture.
    - Your subject will be well exposed and your background brighter.



Spot Metering (from cheek)



Matrix (Eval) Metering

If I really wanted the background to show, I would have used Center metering and used a reflector to light his face more.

# IMPORTANT TIPS

## **When metering, your shutter speed WILL change.**

- WHY does the shutter speed change? Because your camera has evaluated the light and at first your camera meter is saying, “hey, you are way underexposed” or “hey, you are a bit overexposed.”
- HOW are you changing the shutter speed? By moving the back scroll wheel, you are telling the camera to let in MORE light (if at first the meter is underexposed) or you are telling it let in LESS light (if overexposed).

## **WATCH your shutter speed to make sure that it does not get too slow after you have metered.**

- If it is below 2 x length of your lens you need to do one of two things:
  - Increase your ISO so that your camera is MORE sensitive to light.
  - Widen your aperture (smaller F#) so that MORE light is coming in through your lens opening.

# HELPFUL LINKS

- Helpful links on metering:
  - [How To Use DSLR Camera Metering Modes](#)
  - [Digital Camera Metering Modes](#)
  - [Introduction to Metering](#)

