

# Photography 10/ Exposure Equivalents

## USING YOUR METER

The goal in taking a picture of anything has a two-fold purpose. One is to get the perfect negative; the other is to make that picture communicate to the viewer at some emotional level.

What does need to be consistent is that the negative be exposed correctly and have all the tonal range possible to make your job in the darkroom easier. This involves working with your meter, understanding the relationships between f/stops and shutter speeds and paying close attention to the image capture process. IT is just as important as the film development process.

When working with exposure one of the key things to remember is the reciprocal nature of exposure. F/stops and shutter speeds are relational when working with a precise exposure reading.

In other words: When you have manipulated your meter using these two controls to a point that yields an appropriate reading, you then have the opportunity to modify that reading to suit other factors such as depth of field, fast or slow shutter speed or over and under exposure of the image. **YOU HAVE OPTIONS!**

### MEASURING UNITS OF SHUTTER SPEEDS:

T B 1 1/2 1/4 1/8 1/15 1/30 1/60 1/125 1/250 1/500  
1/1000 1/2000

T = Timed exposure (open the shutter and walk away from the camera)

B= Bulb, used in timed exposure (shutter open as long as the shutter release is depressed)

**\*\*\* Shutter speeds regulate the amount of time allowed for light to hit the film.**



### MEASURING UNITS OF APERTURES:

f/2 f/2.8 f/3.5 f/5.6 f/8 f/11 f/16 f/22 f/32  
f/45 f/64

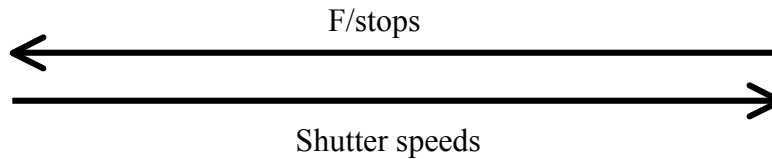
**\*\*\* F/stops regulate the amount of light that is to reach the film.**



Larger aperture  
More light to film



Smaller aperture  
Less light to film



For both shutter speeds and f/stops, the difference between each measurement is either 1/2 or double of number preceding or behind it.

**Example – Your basic exposure is:**

**F/2 @ 1/250<sup>th</sup> of a second**

**You want a smaller aperture for better depth of field – so your new exposure is:**

**F/5.6 @ 1/30<sup>th</sup>**

Both exposures will give exactly the same amount of light penetrating to the film but with different results.

One has a faster shutter speed ([f/2@1/250th](#))- while the other has a smaller f/stop and a slower shutter speed ([f/5.6@1/30th](#)). A change in one measurement (f/stop) necessitates a change in the other measurement (shutter speed) if you are to keep the exposure equivalent equal.