

# BASIC CAMERA SETTINGS

To create an image with a camera you need three basic settings. They are:

- A. APERTURE (LENS OPENING) - Determines how much light will strike the film.
- B. SHUTTER SPEED - Determines how long light will strike the film.
- C. FOCUS - Determines how sharp and clear an image is.

I. **APERATURE (LENS OPENING)** - The light that passes through the lens to the film, this opening is called the APERATURE.

- A. Simple cameras - Have what is called a fixed aperture, which means that the size of the opening which light passes through is one size and cannot be changed.
- B. Complex cameras - These cameras have the ability to change so that they can allow more or less light to pass through the lens.
  - 1. The term used to describe changing the aperture to larger or smaller opening is called the F/number or F/stop.
  - 2. These F/stops represent a fraction similar to the lens opening.

<u>Aperture* (Lens Opening)</u>	
<i>Very Large</i>	<i>Very Small</i>
F/1.0, F/1.4, F/2, F/2.8, F/4, F/5.6, F/8, F/11, F/16, F/22, F/32	
<i>Large Amount</i>	<i>Small Amount</i>
<i>Of Light Let In</i>	<i>Of Light Let In</i>

\*Some cameras have F/stops in between the regular number settings, usually they are not marked on the camera. NOT FOUND ON MOST CAMERAS.

- C. OPEN APERATURE 1 STOP - doubles light let in.
  - “ “ 2 “ - 4 times the amount light let in.
  - “ “ 3 “ - 8 “ “ “ “ “ “ “
  - “ “ 4 “ - 16 “ “ “ “ “ “ “

So on and so forth.

**Refer to handout for further information concerning Aperture and Depth of Field.**

II. **SHUTTER SPEED** - This is the length of time that the shutter (like a curtain that opens and closes) lets light in.

- A. Shutter closed - no light enters
- B. Shutter open - light enters until shutter closes.

THE LENGTH OF TIME THE SHUTTER REMAINS OPENED (usually in fractions of a second) is called the SHUTTER SPEED.

C. SHUTTER SPEED MARKINGS ON CAMERA

Camera Setting		Fraction of Second
B	-	manual
T	-	manual
1	-	1/1
2	-	1/2
4	-	1/4
8	-	1/8
15	-	1/15
30	-	1/30
60	-	1/60
125	-	1/125
250	-	1/250
500	-	1/500
1000	-	1/1000
2000	-	1/2000*

**B** - When pressed with speed set here the shutter will remain open as long as the shutter button is held. Only when the button is released will the shutter close.

**T** - When the shutter button is pressed the shutter will remain open as long as the shutter button is released. To close the shutter it is necessary to press the shutter button again.

\*1/2000 - Not Found On All Cameras.