

Digital Camera Intro and Exercises

DSLR

Digital Single Lens Reflex

White Balance

White Balance





T

COLOR

CORRECTION

85



If color film is not designed for certain kinds of light, a filter must be installed on the end of the lens

White balance

Auto





AWB



Shade



Tungsten



Sunny



Cloudy



Fluorescent



2500 Kelvin

5000 Kelvin

10,000 Kelvin

White balance is a function of a digital camera used to compensate for different colors of light being emitted by different light sources. In digital photography the term is generally used to describe a function of a digital camera that allows you to calibrate the device to correctly display the color white. Once this calibration has been done, the camera should then display other colors correctly as well.

ISO

Higher ISO allows for faster shutter speeds but noise can be created



f/5 @ 1/60 (slow)
ISO 200 (lower number)

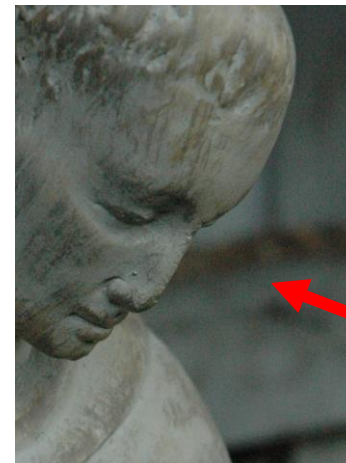
(aperture setting
remains constant)



f/5 @ 1/80 (a little faster)
ISO 400 (a little higher)

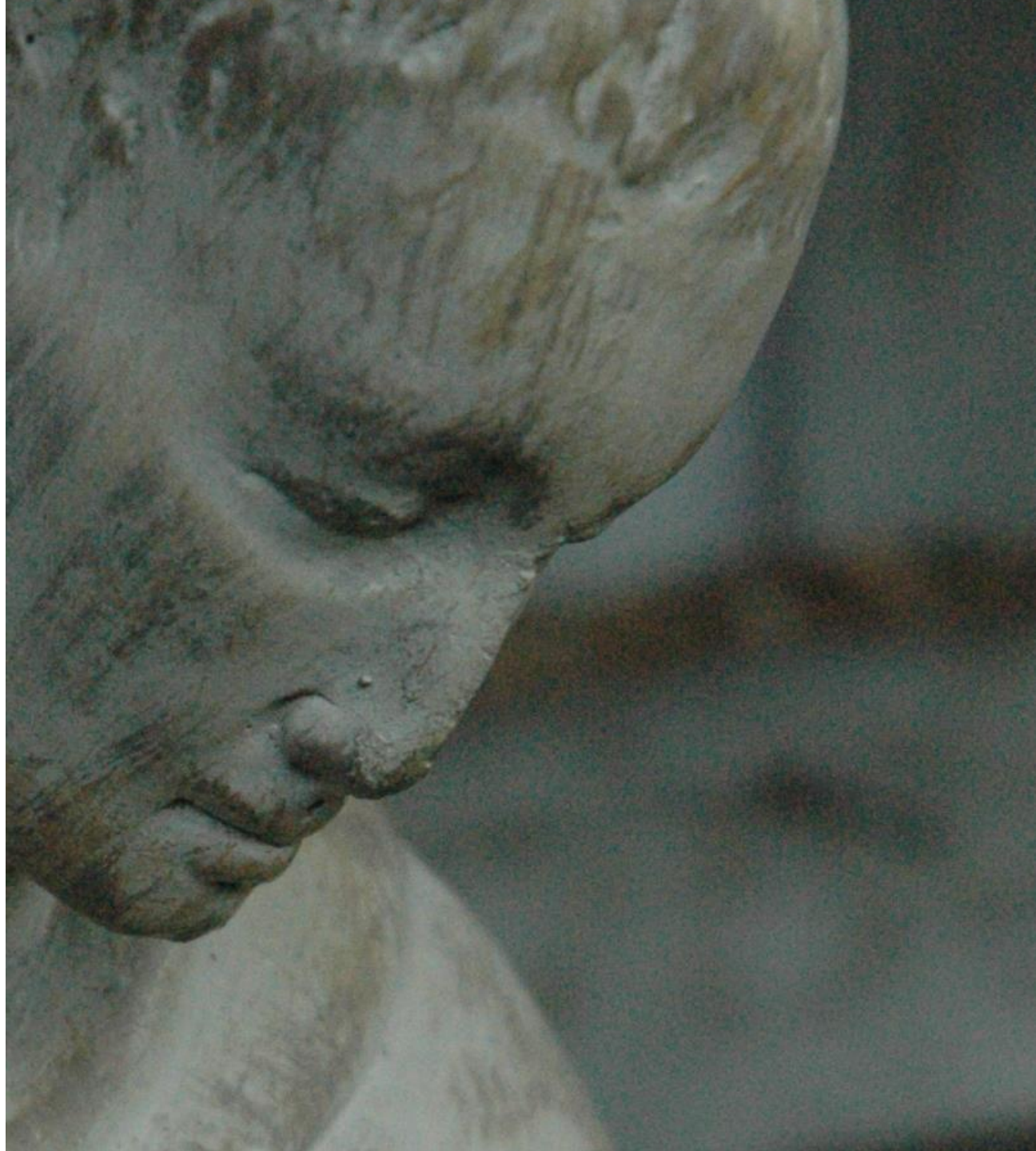


f/5 @ 1/200 (faster)
ISO 800 (higher)



f/5.0 @ 1/400 (quite fast)
ISO 1600 (much higher)

More noise present



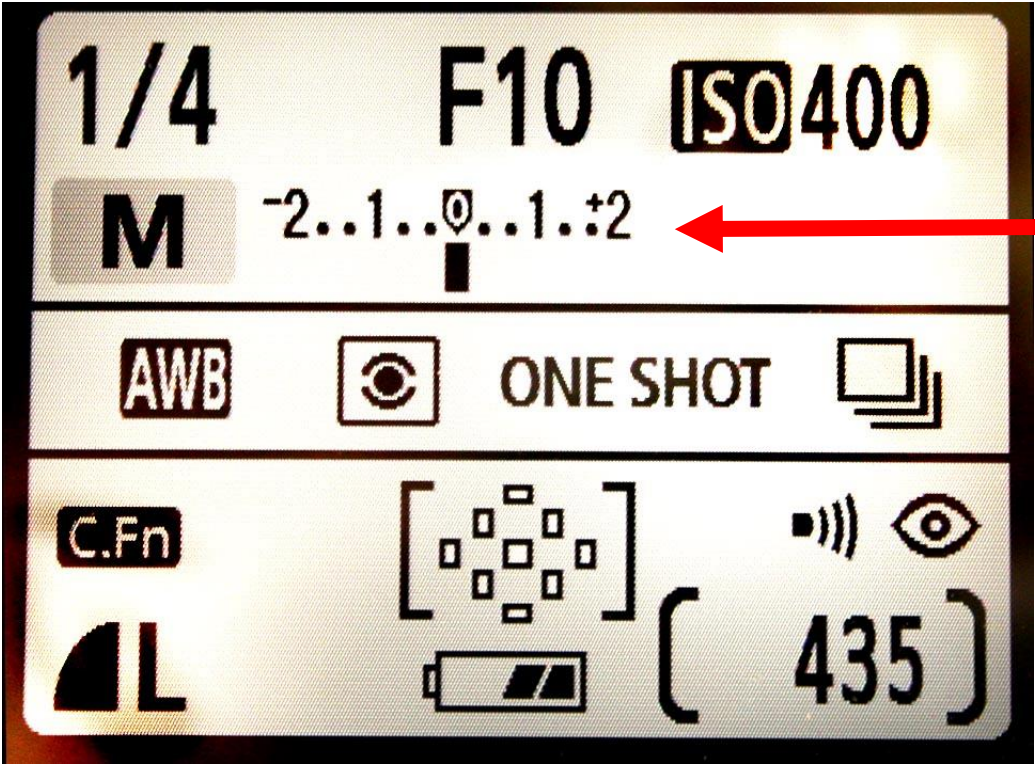
Changing ISO

- **ISO** can be changed depending on lighting conditions – development time must be altered accordingly (called a push or pull)
- **ISO** (generally) **should not be changed** in the middle of a shoot on a **film camera**
- **ISO may be changed** from exposure to exposure on a **digital camera**

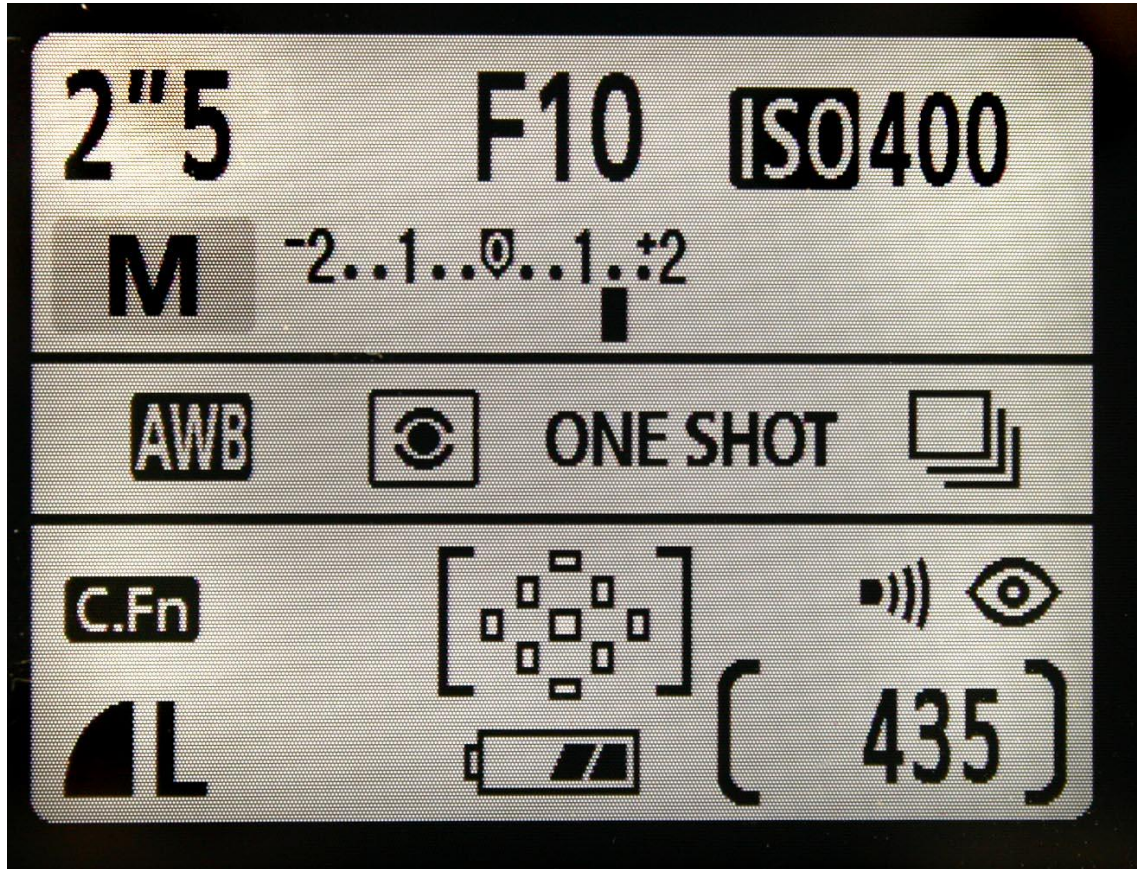


Light Meter

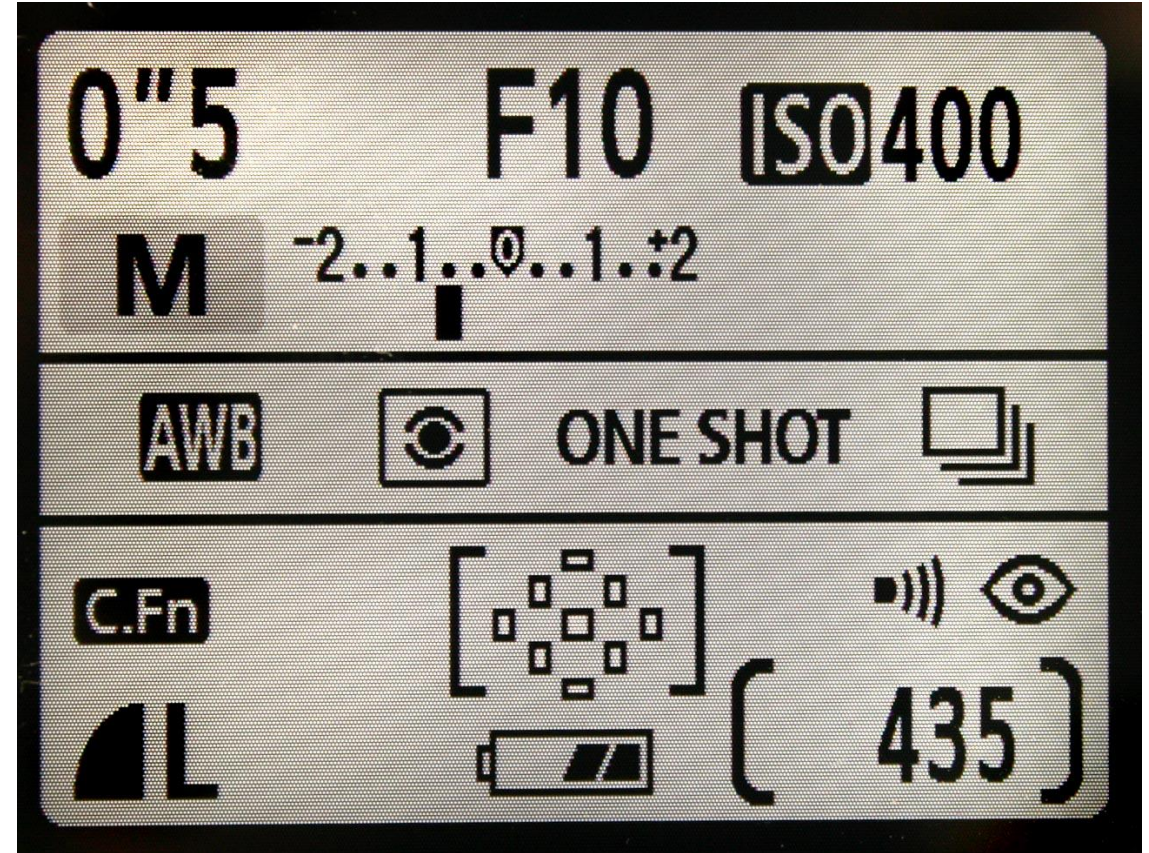




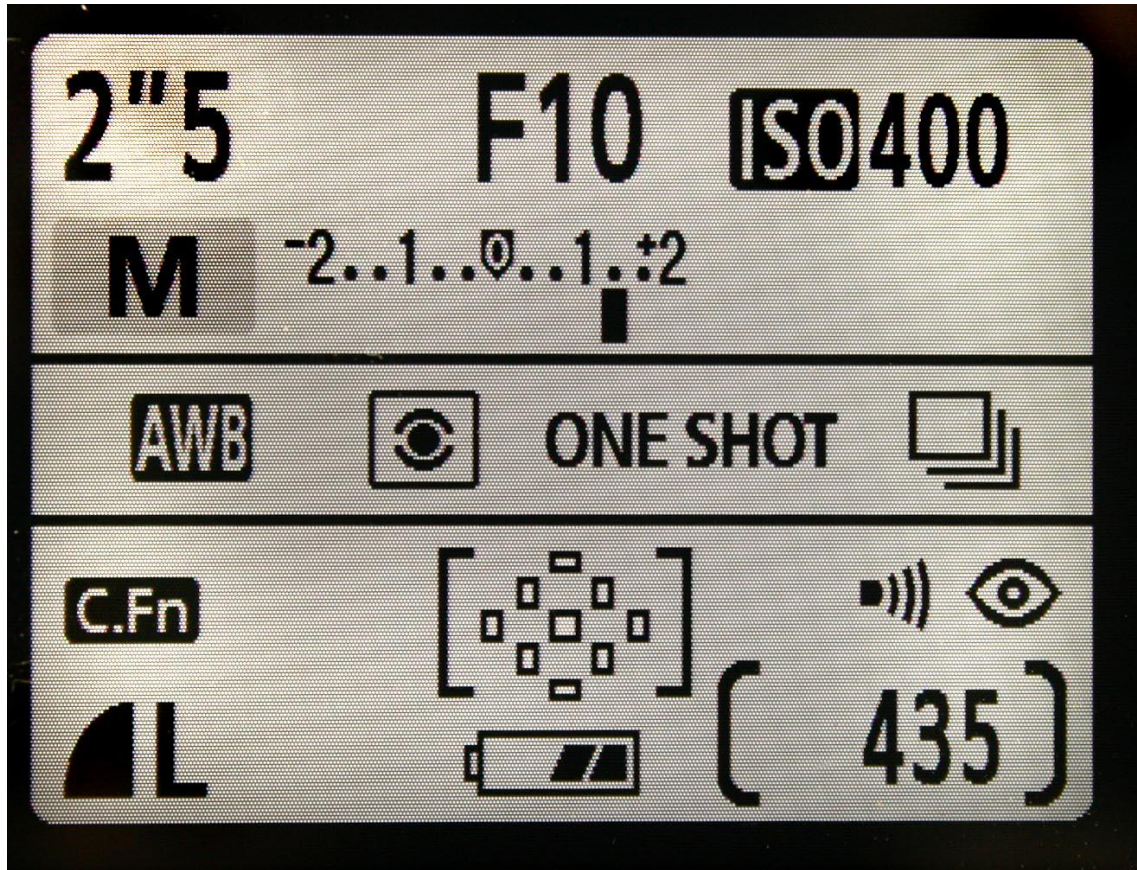
Over Exposure



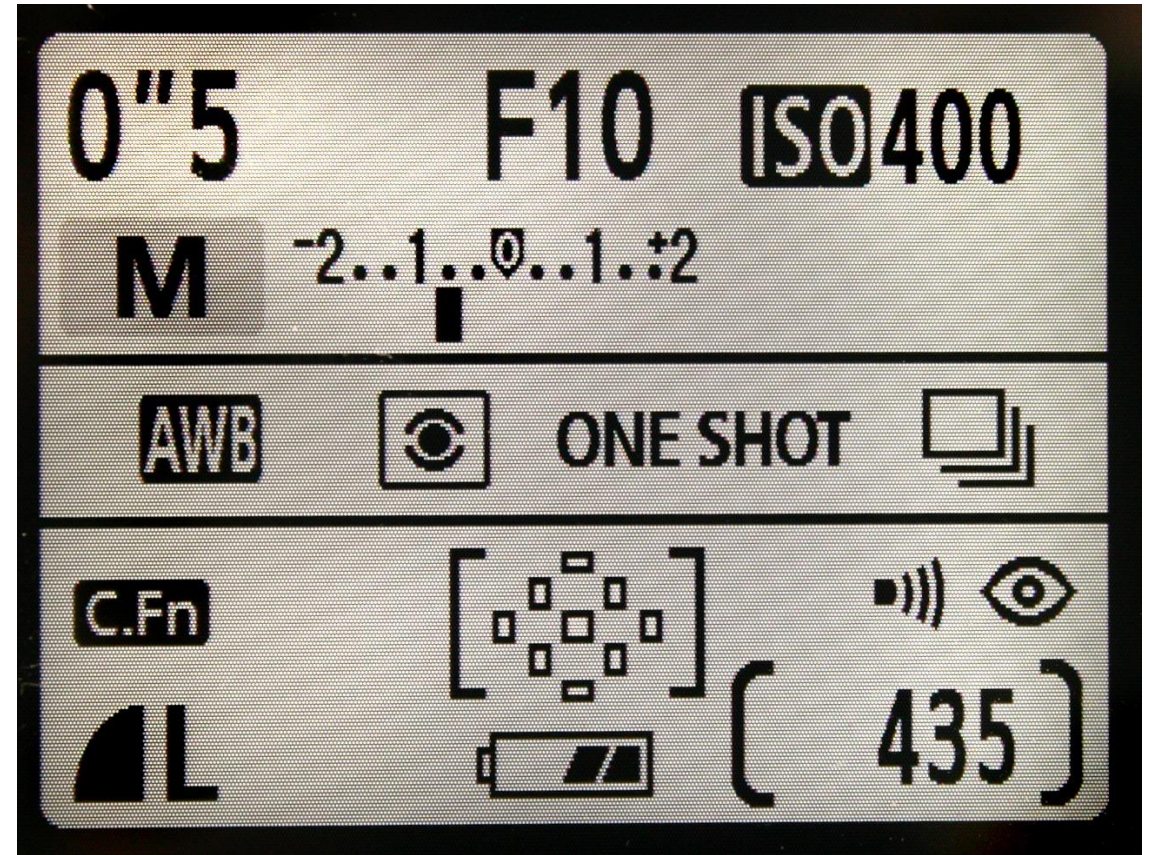
Underexposure



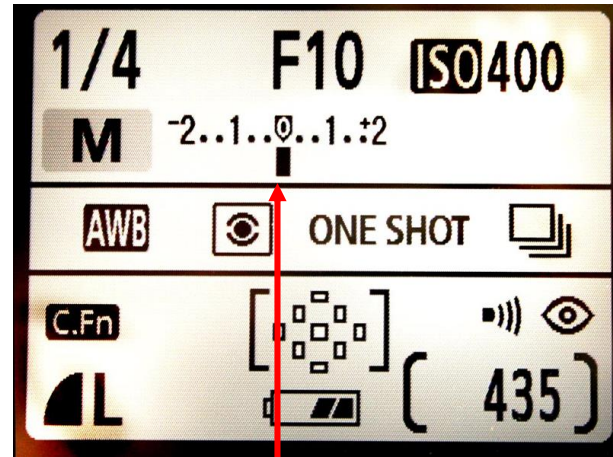
1 1/3 Stop Over Exposure



2/3 Stop Underexposure



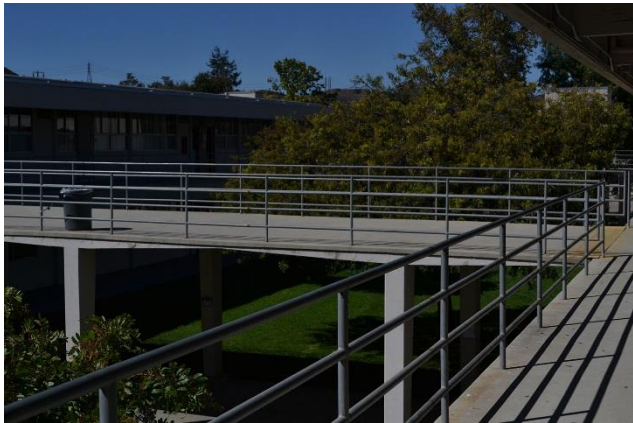
Bracketing



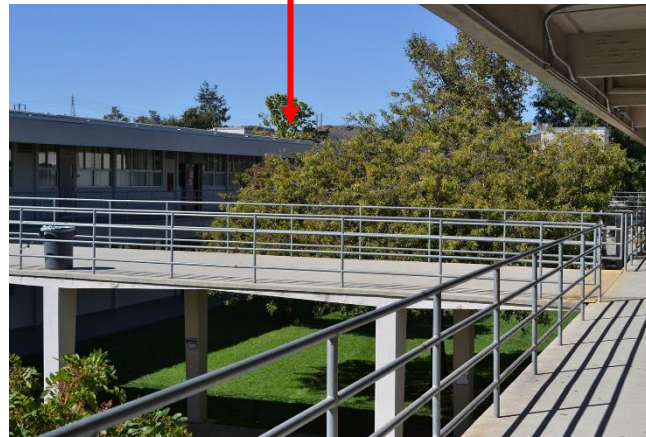
-1



+1



-2



0

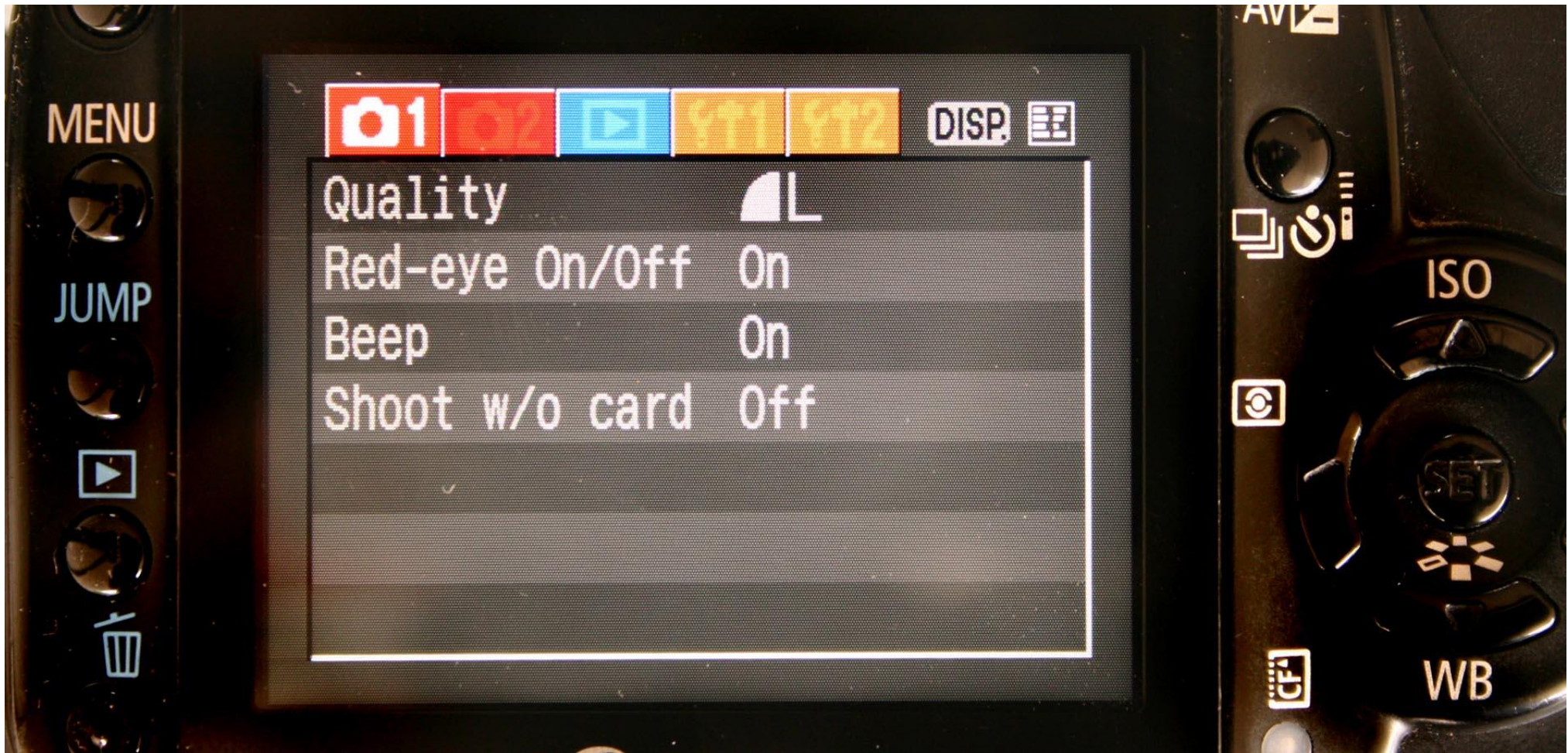


+2

File Type

RAW vs. JPEG

- RAW files are massive and hold the most information
- Cannot set White Balance on RAW – White Balance is adjusted in post production
- Files cannot be opened without certain software
- Professionals use RAW all the time – files are better quality and white balance is not an issue
- JPEGs (Joint Photographic Experts Group) are compressed Files – take up less space
- White Balance must be monitored and adjusted as necessary
- Files can be opened anywhere
- You can use JPEG or RAW in this class



MENU

JUMP

Camera icons: Camera 1 (red), Camera 2 (red), Play (blue), P-T1 (yellow), P-T2 (yellow), DISP. (white), and a grid icon (white).

Quality L

Red-eye On/Off On

Beep On

Shoot w/o card Off

AV/C

Icons: LCD, Power, and a vertical bar icon.

ISO

Camera icon

SET

CF







WB

MENU

JUMP

Quality

3888x2592

| | |
|---|---|
|  L |  L |
|  M |  M |
|  S |  S |
| RAW+  L | RAW |

Av 



ISO



SET



CF

WB

PSD and TIFF

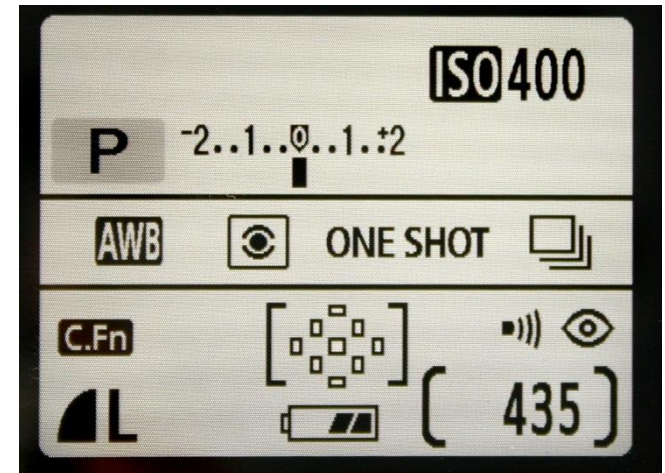
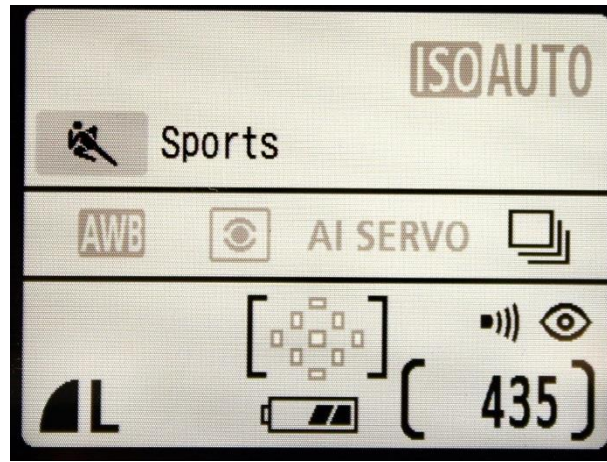
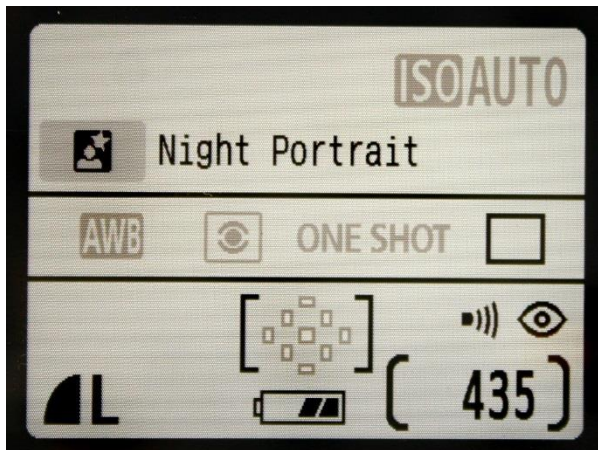
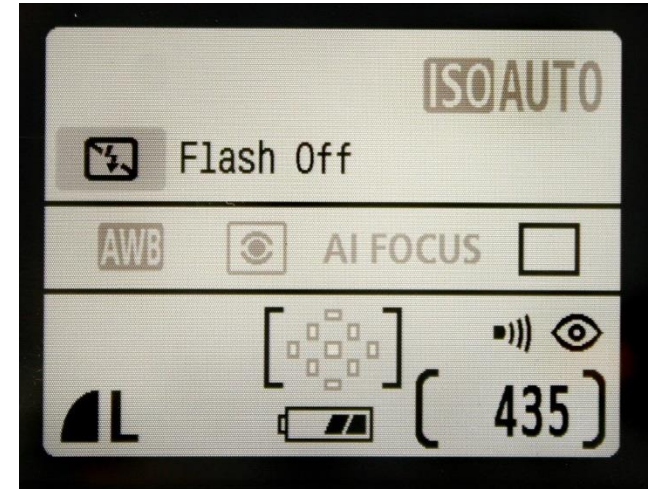
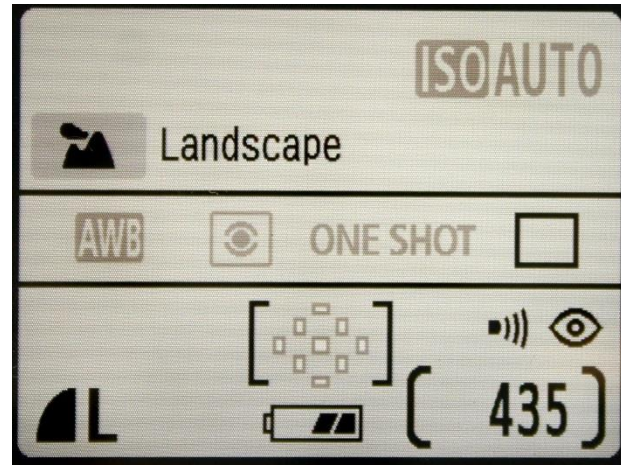
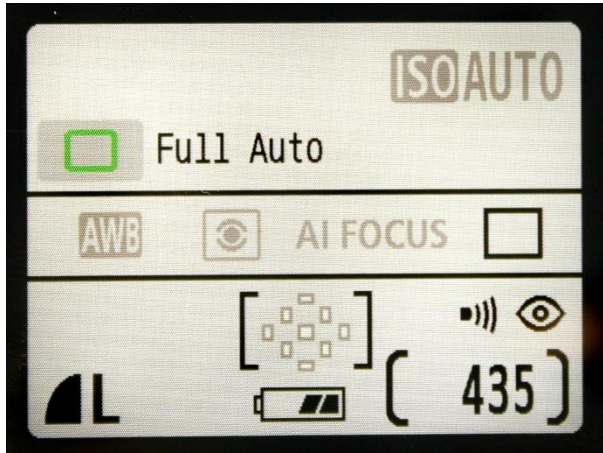
- PSD = Photoshop Document
- Save any image you have edited on Photoshop as a PSD (File > Save As > PSD)
- It has all of your edits and the file is large
- TIFF = Tagged Image File Format
- Does not compress files like JPEGs do – good to store your files as TIFFs
- File conversion can be done in Photoshop (File > Save As > TIFF)

Exposure Mode

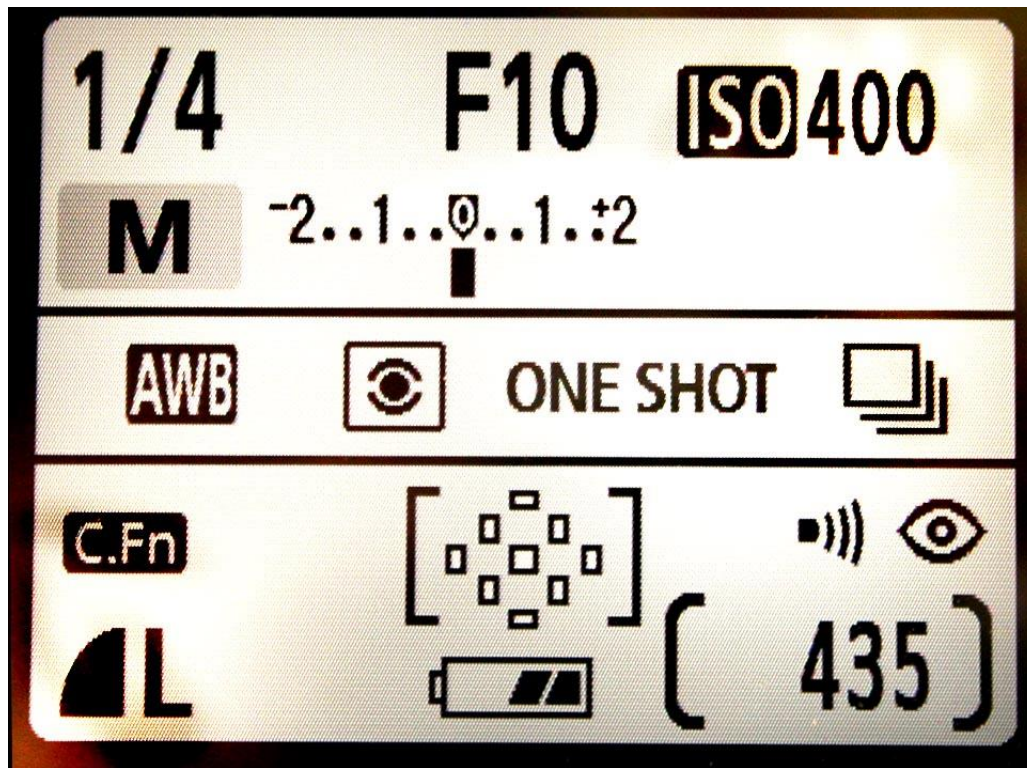
Shooting Modes



Some Auto Modes (dummy modes)



Manual Mode – Most Control



- Shutter is usually changed by moving the dial
- Aperture is usually changed moving the dial while holding the +/- button also might have the aperture symbol next to it



For Shutter on Manual Mode

Dial

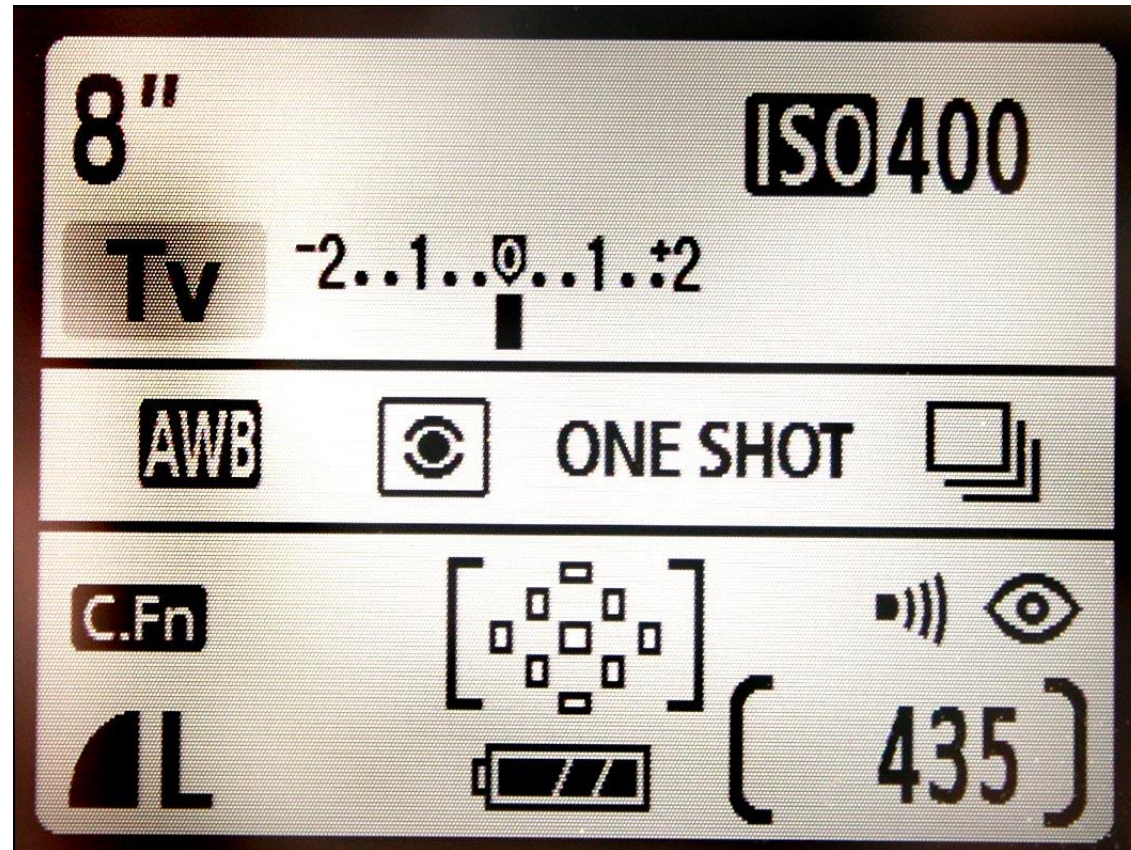
For Aperture on Manual Mode



Push this button while moving the dial



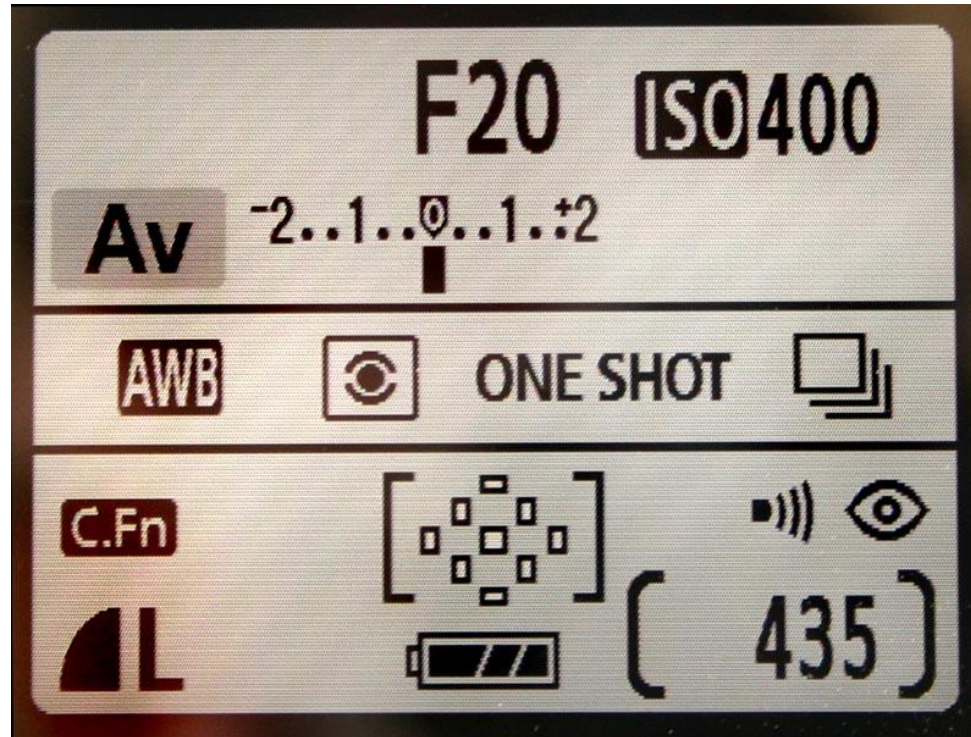
S or Tv Mode (Shutter Priority or Time Value Mode)



You set shutter speed, camera sets the aperture

A or Av

(Aperture Priority or Aperture Value Mode)



Change aperture by moving dial

You set aperture, camera sets the shutter speed

Exposure Compensation while on Program, S (Tv), or A (Av) Modes



- Hold +/- button while moving dial
- This current displayed setting would overexpose every shot by one stop



The Rhondda - Mark Galer

Photo Two – Digital Camera
Campus Shoot and Digital
Editing Projects

Part One - the DSLR



Manual Mode Exercise

- Shoot on Manual Mode:
 1. One Line Image
 2. One Texture Image
 3. One Shape Image

Fran Gonzalez



Lindsay Beeder



Alyssa Parker



Depth of Field Exercise

- Shoot three objects or people in a row at a large, medium and small sized aperture in Av or A mode

f/32



f/11



f/4.5





f/32



f/11



f/4.5

Portrait

- Shoot one portrait with as shallow depth of field as possible in Av or A mode

(f/1.7-f/5.6 range)

Ryan Phillips



Carrie Phillips



Eric
Lindroth



Motion Exercise

- Shoot in Tv or S mode:
 1. One freeze
 2. One blur
 3. One pan

Daniel Lacey



Daniel Lacey



Quinn Levin





Tyler Macdonald

White Balance Exercise 1

- Shoot the same subject with the same light source in at least four different white balance modes



AWB



Shade



Tungsten



Sunny



Cloudy



Fluorescent

White Balance Exercise 2

- Shoot three different images in three different light settings on the correct White Balance setting (not AWB)
- So if you are shooting in sun put the white balance on the sun setting, shade = shade setting, fluorescent = fluorescent setting, etc.

WIFE

- White Balance
- ISO
- File size/type
- Exposure Mode