

Camera Basics



Question:

- Snapshot . . .
- Photograph . . .
- What is the difference?

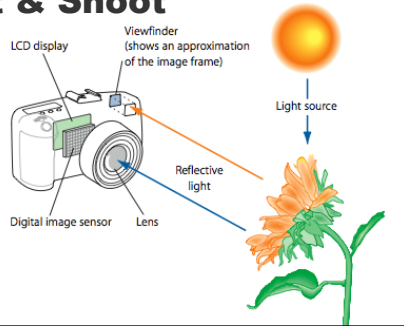
2 Types of Cameras

- Point and Shoot
- Single Lens Reflex (SLR) or (DSLR)
- there are others we won't get into this class

Point and Shoot

- | | |
|---|---|
| <ul style="list-style-type: none">● Pros● Easy . . . just POINT & SHOOT● lightweight● built in flash● smaller in size | <ul style="list-style-type: none">● Cons● less control of settings● cannot interchange lenses● less durable |
|---|---|

Point & Shoot



Single Lens Reflex (SLR)

- Named for a "reflexing" mirror
- Image framed through lens prior to capture
- Adjustable settings & interchangeable lenses

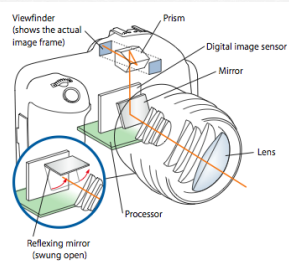


How does it work? (SLR)

- When a picture is taken:
 - mirror swings out of the way
 - light passes through open shutter
 - exposes film or digital image sensor



Digital SLR



Lynda shooting w/60D what is an SLR video

Camera Components and Concepts



Parts of the Camera

- Body
- Lens
- Aperture
- Shutter
- Digital Image Sensor
- Memory Card
- External Flash

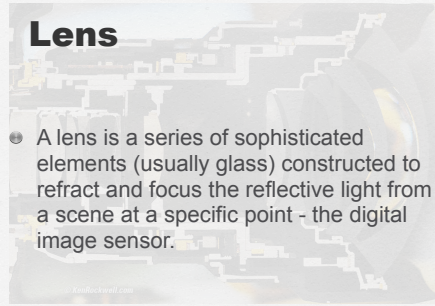
Camera Body



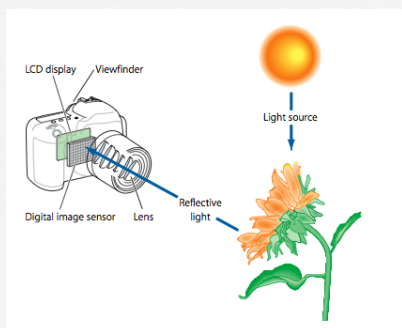
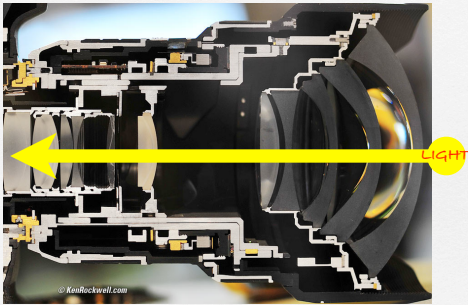
- The main “structure” or chassis of the camera
- Accepts lenses, flashes and accessories

Lens

- A lens is a series of sophisticated elements (usually glass) constructed to refract and focus the reflective light from a scene at a specific point - the digital image sensor.



Lynda - Foundations of Photography- Lenses
"Why does the Lens Matter"
"What is a lens"

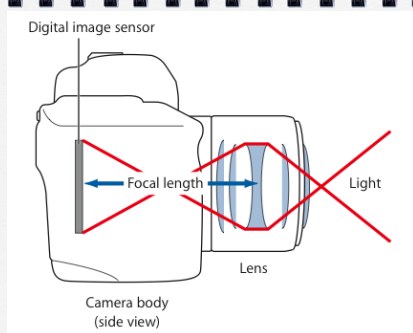


Understanding Lenses

- Focal Length
- Types
 - Wide
 - Telephoto
 - Zoom
 - Prime

Focal Length

- The distance from where light enters the lens to the point it is focused on the image plane (sensor)
- The amount of magnification of the lens



How Lenses are Made



Lens Categories (classify)

□ Wide-Angle Lens

- short focal length that takes in a wide view



□ Telephoto Lens

- long focal length that magnifies the subject
- typically used for sports and nature photographers



Lens Types

□ Zoom Lens

- can mechanically change focal length
- example 17-55mm
- convenient
- extra glass adds weight and slightly lower quality
- less glass = better quality



Canon EF-S 17-55mm f/2.8 IS USM

Lens Types cont.

□ Prime Lens

- aka: Fixed Lens
- has a **fixed** focal length that is not modifiable
- often contain wider apertures
 - wider apertures allow brighter images in low-light situations
- primary use = portrait photographers



Canon EF 28mm f/1.8 USM
Wide Angle Lens

Focal Length Comparisons

- [Canon Tutorial](#)
- [B+H Photo Tutorial](#)

Wide



vs.

Telephoto