• The eye gathers patterns of reflected light which the brain translates into images we see

• Still Film Cameras record light patterns on film coated with light sensitive chemicals

• Convex lenses (curved outwards) invert images

• The brain and cameras turn images right side up again
• Record images in the same way as still film cameras, they just do it more often

• Eight mm: 18 fps

• 16 and 35mm cameras take 24 fps

• When pictures are projected onscreen they give the illusion of continuous motion
• The viewer’s mind fills in the gaps between the individual frames due to this physiological phenomenon.
• Lens focuses light patterns onto a light-sensitive surface made up of small flat chips called CCDs

• Each CCD contains thousands of tiny light-sensitive areas (pixels) which change according to the color and intensity of the light hitting them
• Images are electronically collected off the chip at the rate of 25-30 fps

• At the viewfinder or TV set the process is reversed to recreate the original image

• Persistence of vision causes the viewer to perceive the separate pictures or frames as continuous movement.
• Amount of light that comes through the lens and hits the film or CCD chip

• The hole in the center of the lens that the light travels through is the aperture

• F 2 means that the aperture is 1/2 as big across as the lens is long--16 is 1/16

• 1 stop lets in twice as much or 1/2 the light
Three Factors that Determine Depth of

- Lens Type (Focal Length)
- Distance from Subject
- Aperture
Lens Type
COLOR TEMPERATURE

- Color films and CCD chips can only handle only one color of light.
- Color filters are used to convert the existing light to the color temperature required.
- Color films and ccd chips can only handle only one color of light

- Color filters are used to convert the existing light to the color temperature required
Enables an “appalling lack of discipline” on the part of the shooter.

Not enough financial penalty for shooting poorly.

The expensive 16mm documentary has gone.
- F-stops
- Shutter speeds
- Film emulsions
- Incident vs reflected
- Now you have to do it all!
- And not for much money!
Need to tell a compelling visual story

Adequate coverage: “the range of shots necessary to assemble a finished show”

A successful shooter edits as she/he is shooting

Otherwise there will be
HTTP://WWW.YALEFILMANDVIDEO.COM/

100’ = ABOUT 3 MINUTES
EXCLUDE

EVERY ELEMENT OF COMPOSITION IS THERE FOR A REASON
EXCLUDE IRRELEVANT STORY ELEMENTS
Every Element of Composition is there for a reason

Exclude irrelevant story elements