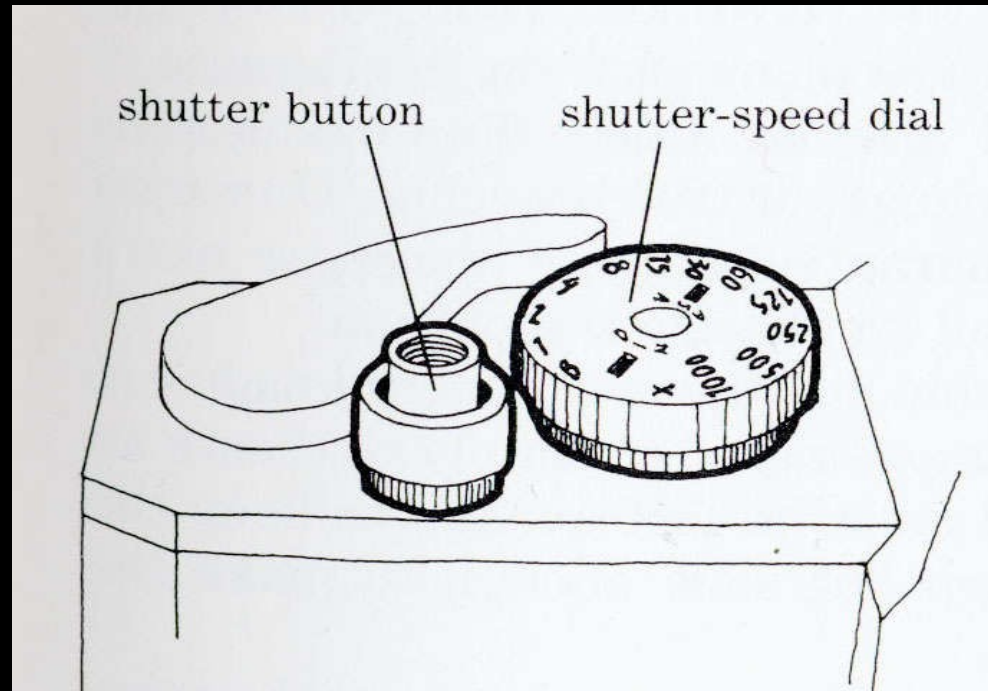


Shutter Speed and Aperture



- *What do they do?*
- *Why do we need them?*
- *Adding to the 'toolbox'*

Shutter speed is simply a measure of how long the shutter stays open when you take your picture.



- shutter speed is measured in fractions of seconds.
- the faster the shutter speed, the less light will hit the film.





Stop action



Blurred action



Panned action



Stop action

- subject and background are frozen
- fast shutter speed
(1/500, 1/1000, 1/2000 second)
- peak of action



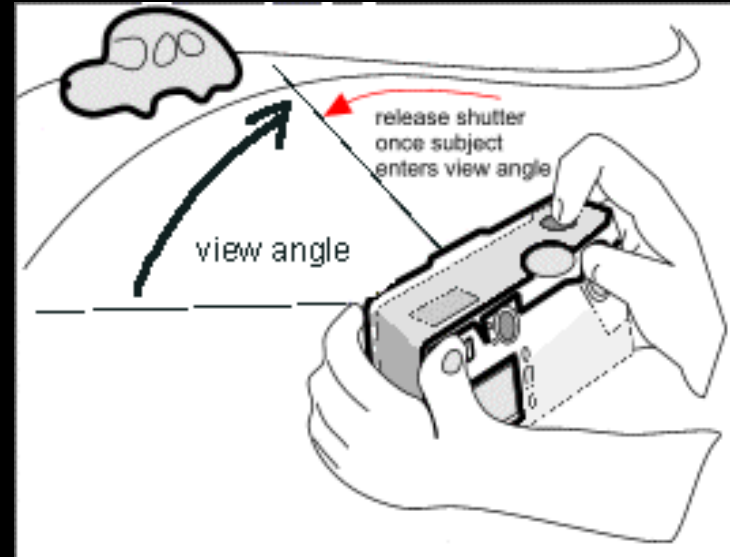
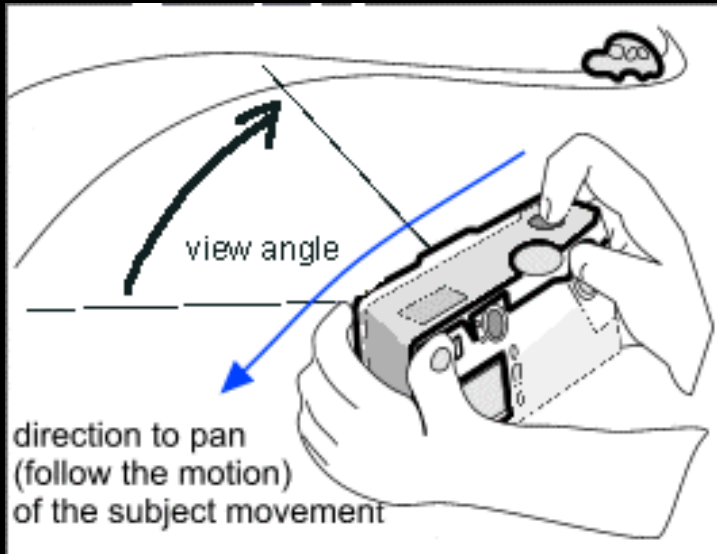
Blurred action

- blurred subject, frozen background
- slow shutter speed
(1/15, 1/8, 1/4, 1/2 second)
- brace the camera!



Panned action

- frozen subject, streaked background
- slow shutter speed
(1/15, 1/8, 1/4, 1/2 second)
- camera moves with the moving subject



Panning

Move the camera *with* the subject as it crosses the field of view of your camera, and you snap the shot as you move the camera *with* the subject.

Panning



1/60th second



1/30th second



1/15th second









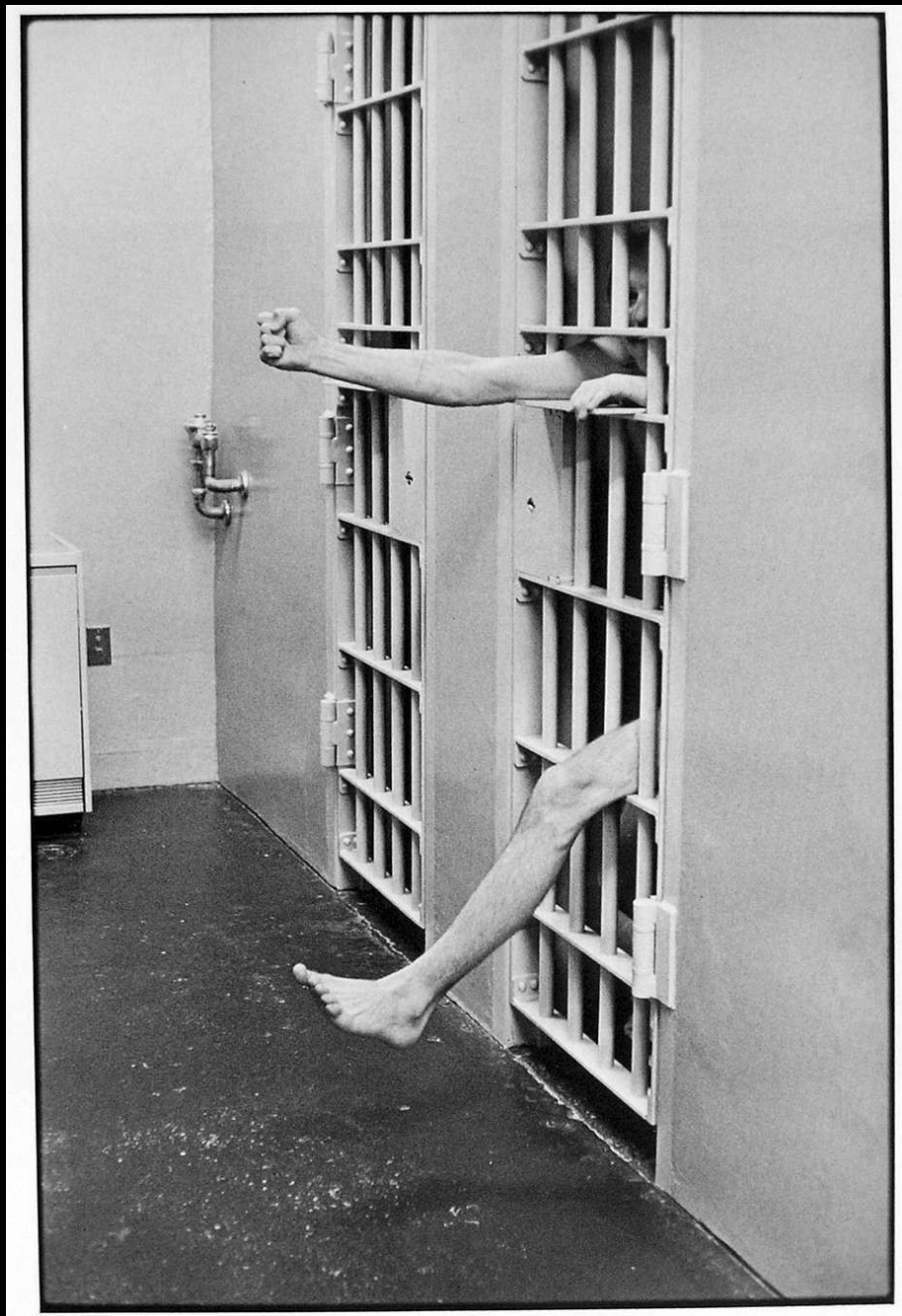














Panning









Panhandler, Manhattan



















Aperture (lens opening)

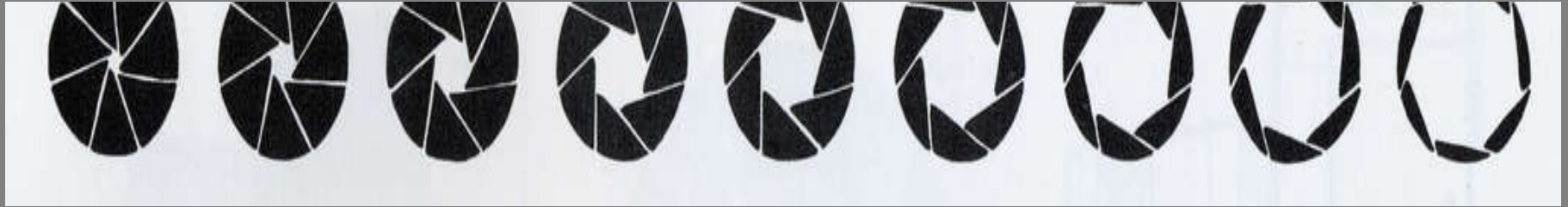


Aperture size is measured in f-stops.

F-stops represent the amount of light going into the camera.

The higher the f-Stop number, the less light.

Lens aperture controls *Depth of Field*

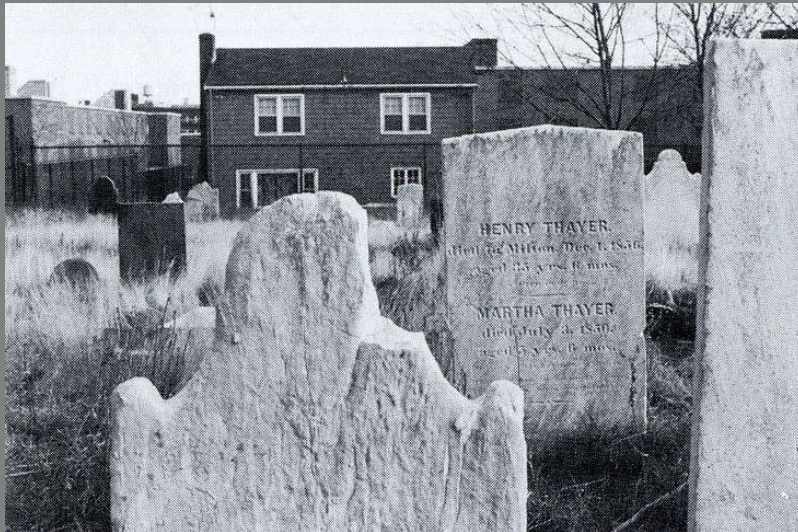


Great depth of field

large range of distances in focus

Shallow depth of field

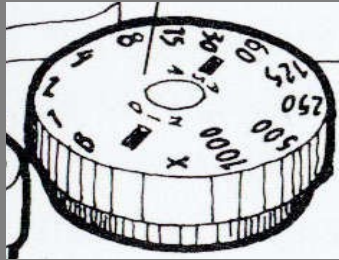
limited range of distances in focus



Aperture and shutter speed:

both control the amount of light that reaches the film for an exposure

The faster the shutter speed is, the less light will hit the film.



2 4 8 15 30 60 125 250 500 1000

The higher the f-stop number, the less light will hit the film





































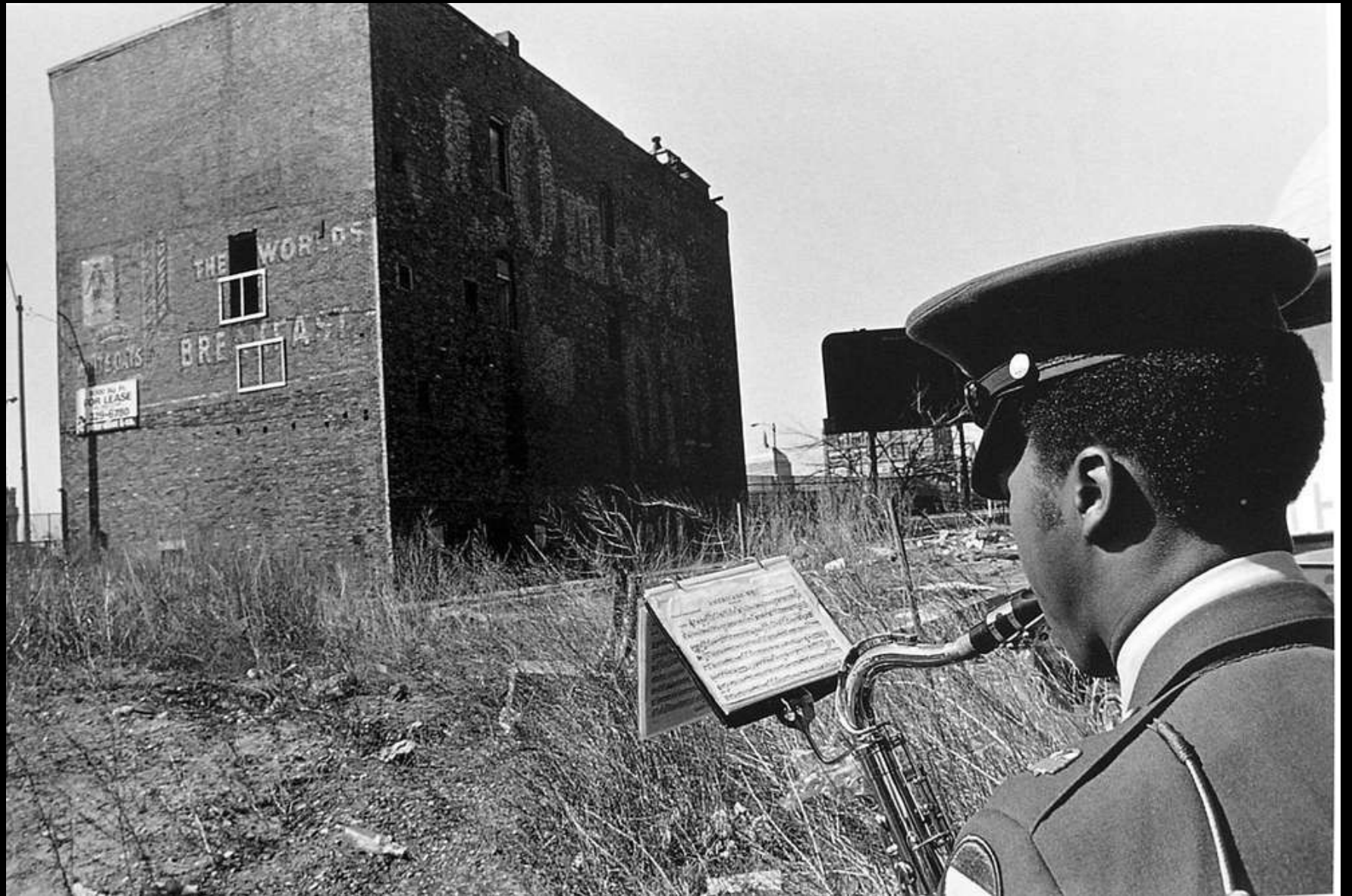










Photo Narrative

Make a series of photographs that depict a scene or event which could be real or imagined.

Turn in three photographs in a narrative series.

- One photo must show **stopped action** using a fast shutter speed.
- One photo must show **blurred action** using a slow shutter speed.
- One photo must show **panned action** using a slow shutter speed.

Each image must represent the beginning, middle, or end of the series.



Duane Michals *The Boogey Man*



Duane Michals- *I build a pyramid*



Duane Michals- The Human Condition



Duane Michals- *Chance Meeting*



Duane Michals- *I remember the argument*



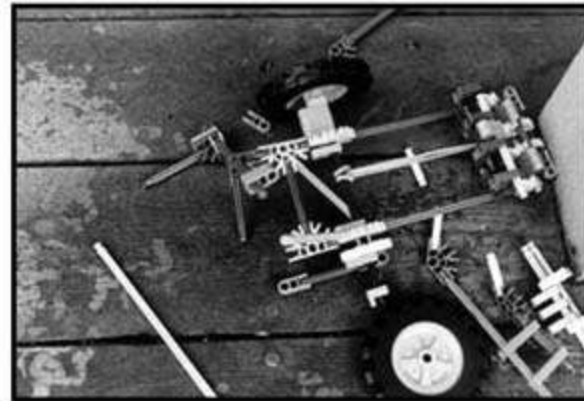
Duane Michals- *Whoever you are*



Student work – San Francisco University High School



Student work – San Francisco University High School



Student work – San Francisco University High School



Student work – San Francisco University High School



Student work – San Francisco University High School



Student work – San Francisco University High School