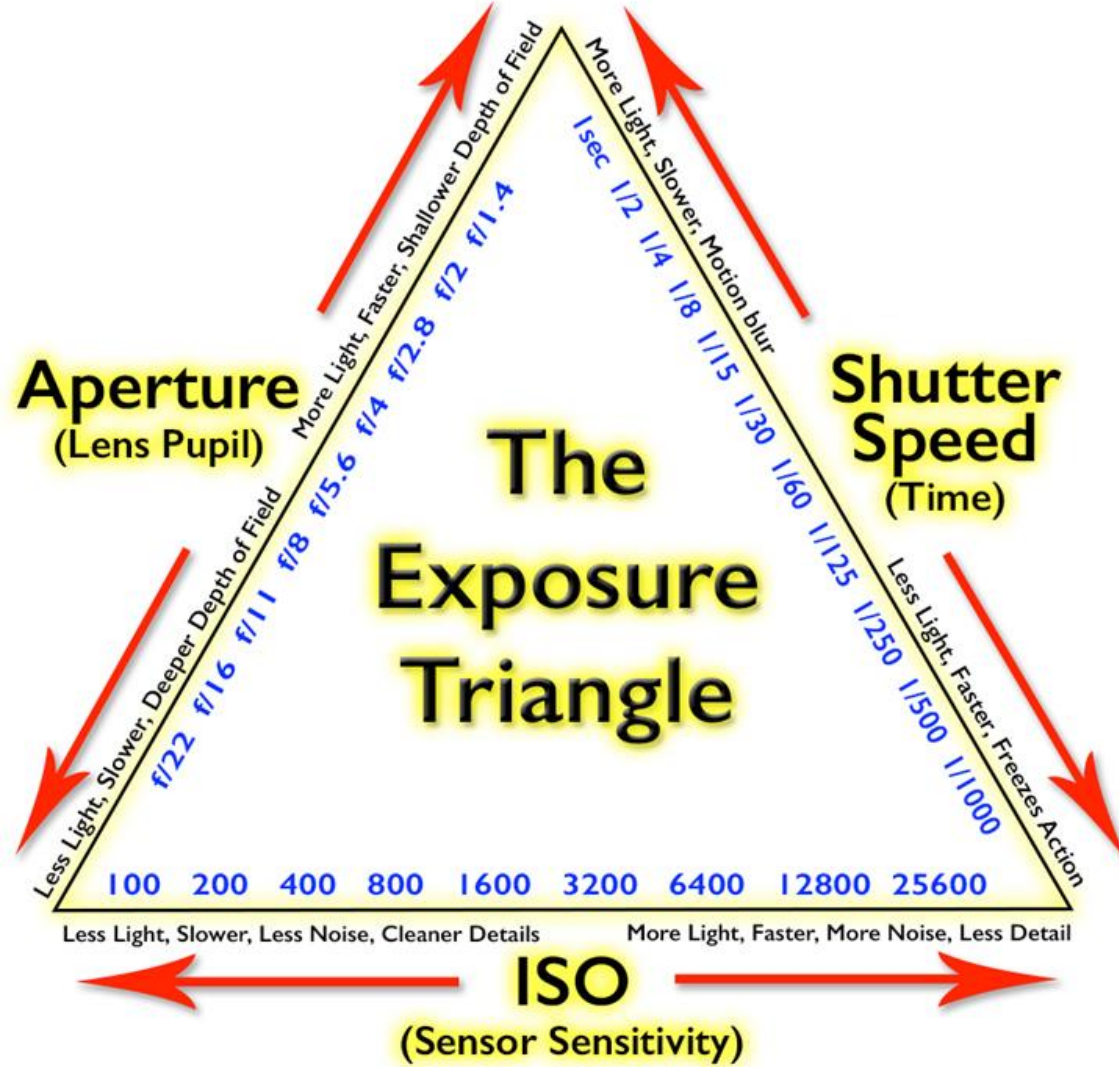


ISO

Film Speed



ISO and ASA

- ISO – International Standards Organization
- ASA – American Standards Association



ISO



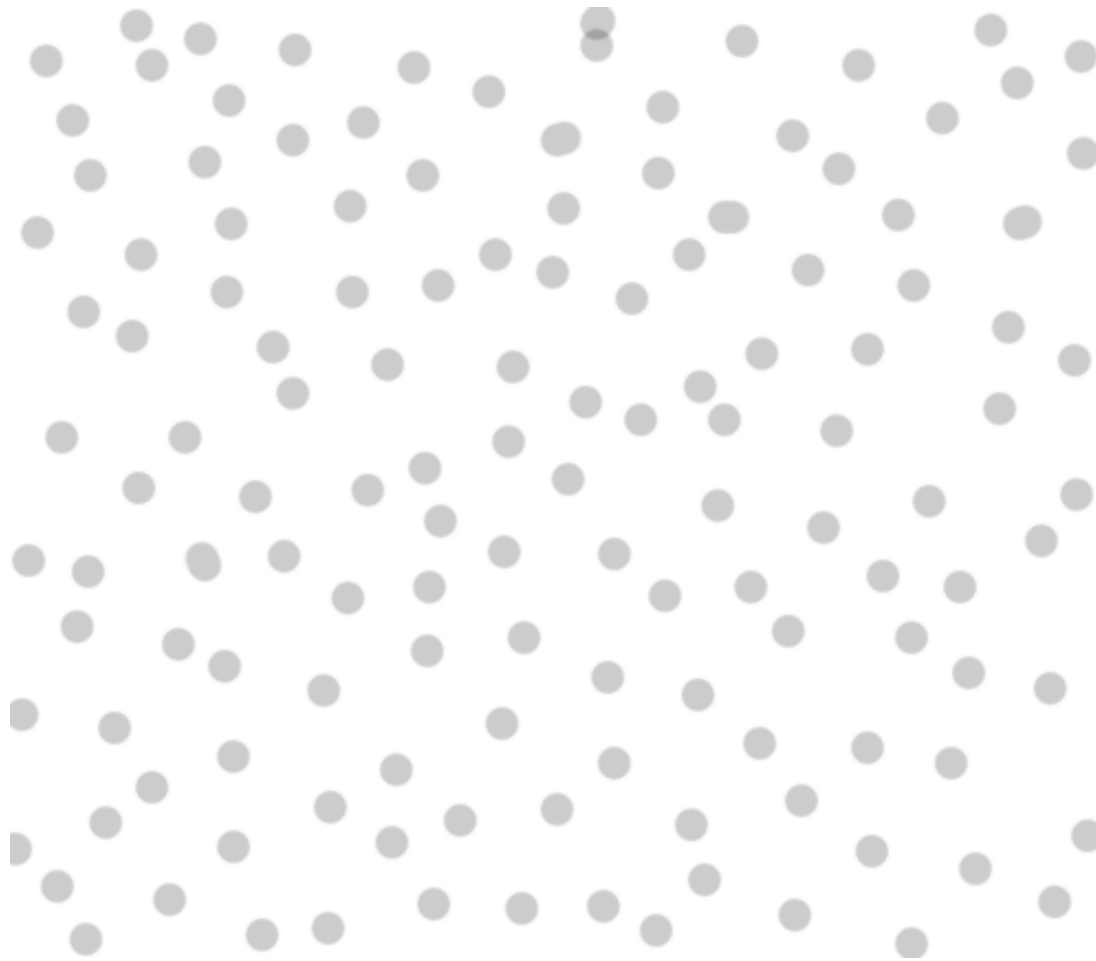
ISO rating on your film/Charged Coupled Device (CCD)

- ISO designates the film's/CCD's degree of sensitivity to light
- Higher number ISOs mean more sensitive to light – can be used in lower light settings (generally)
- Lower number ISOs mean it is less sensitive to light and is used for brighter settings (generally)

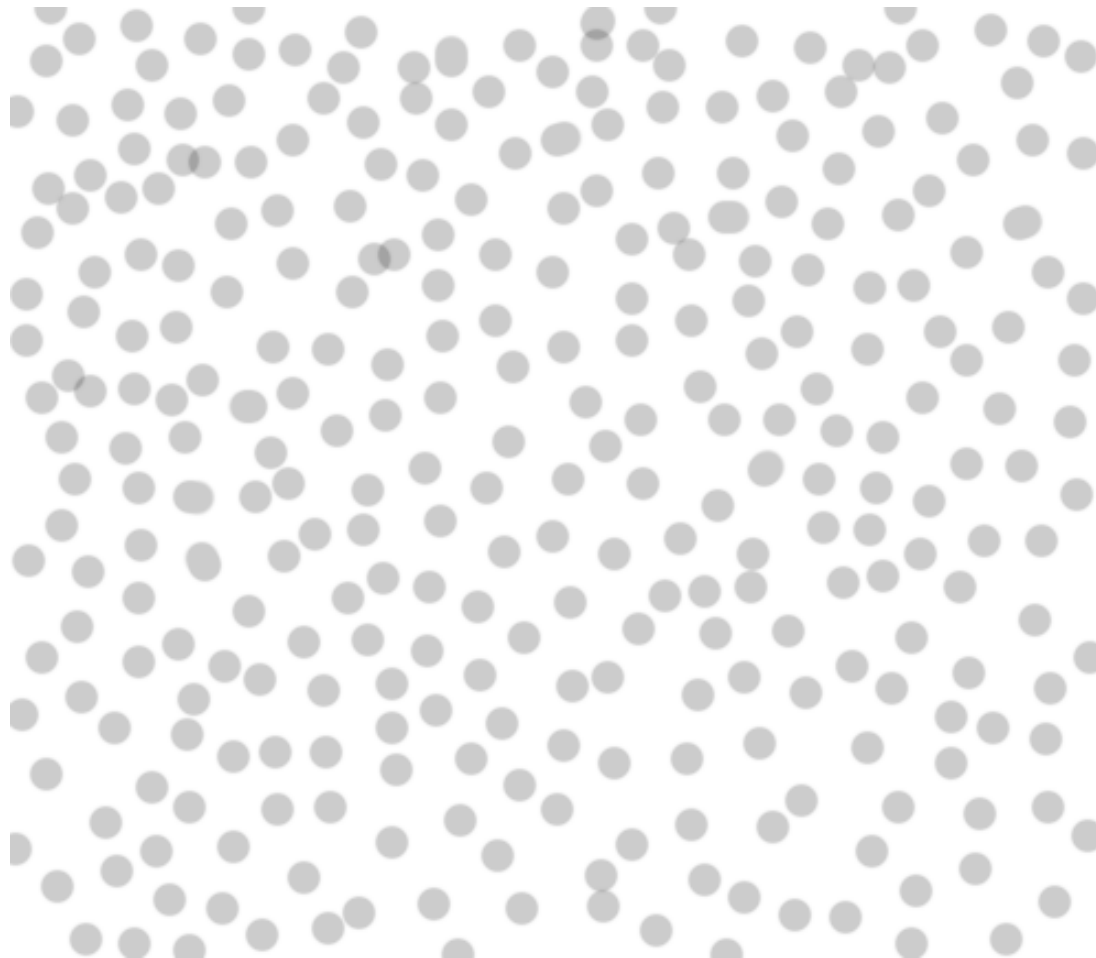
ISO Sensitivity

- The sensitivity of film/CCD to light has to do with the density of the silver halides on the film / photosites on CCD

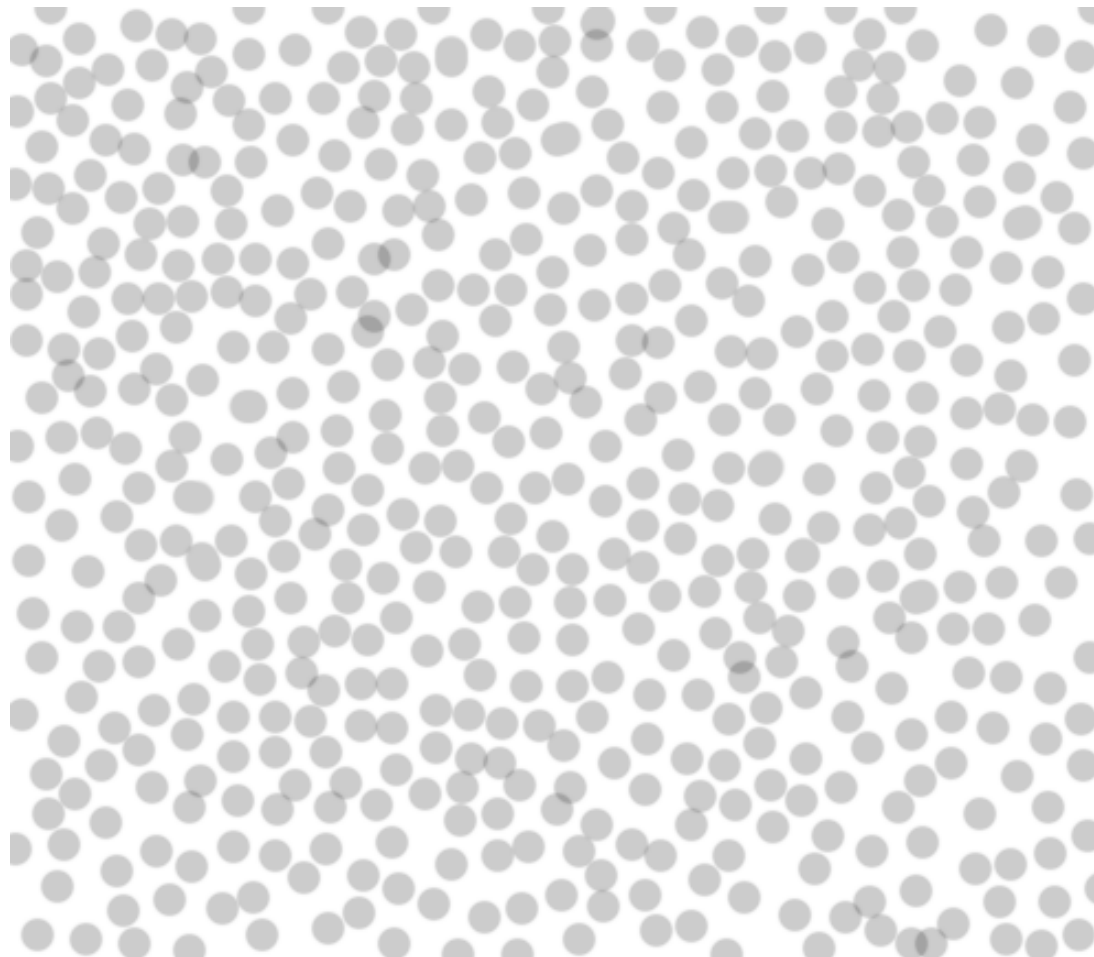
800 ISO



400 ISO

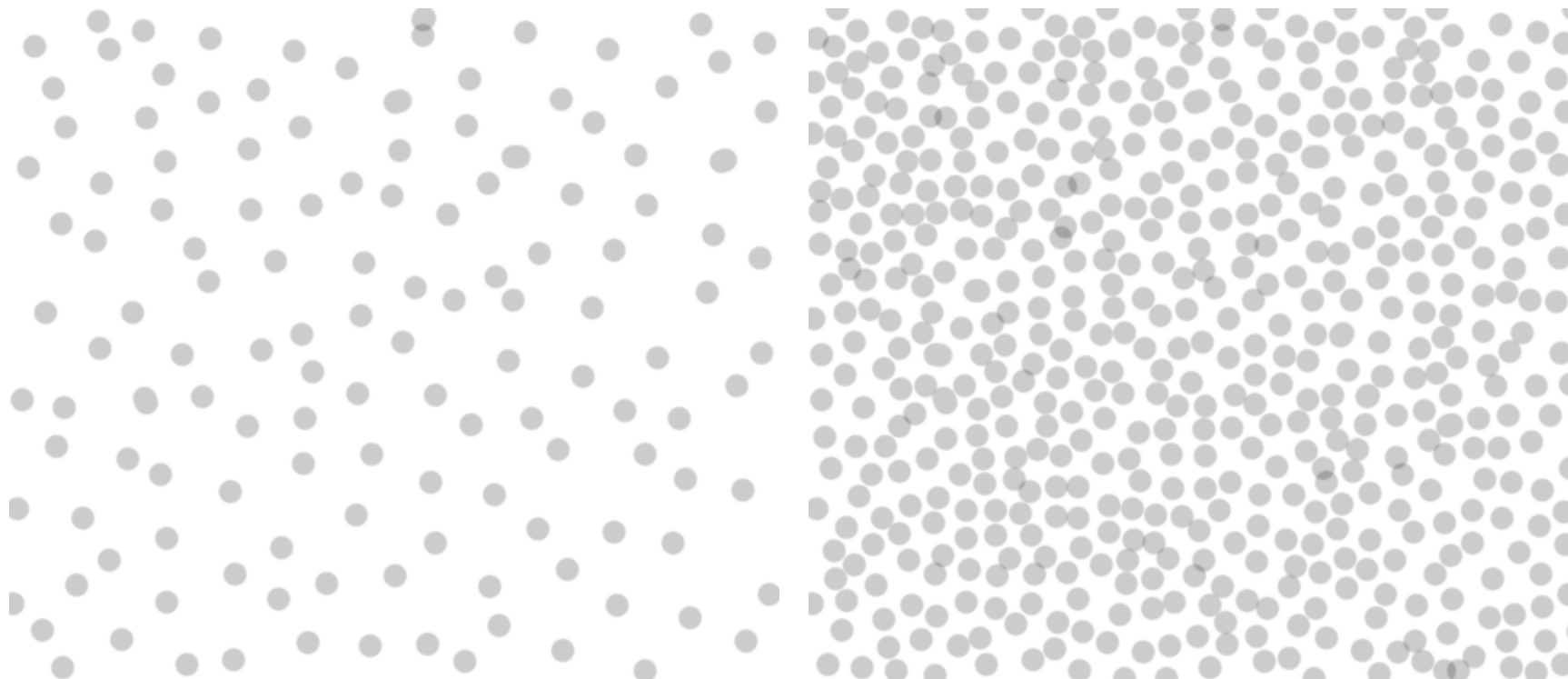


100 ISO

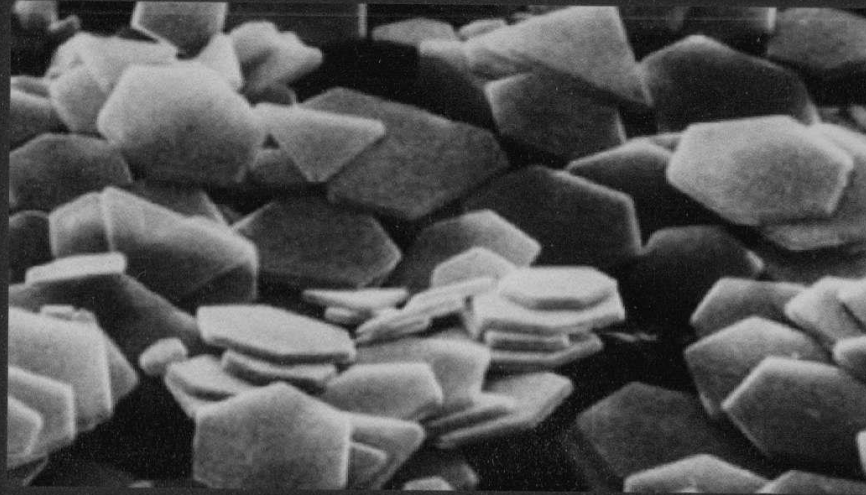


Low Density

High Density

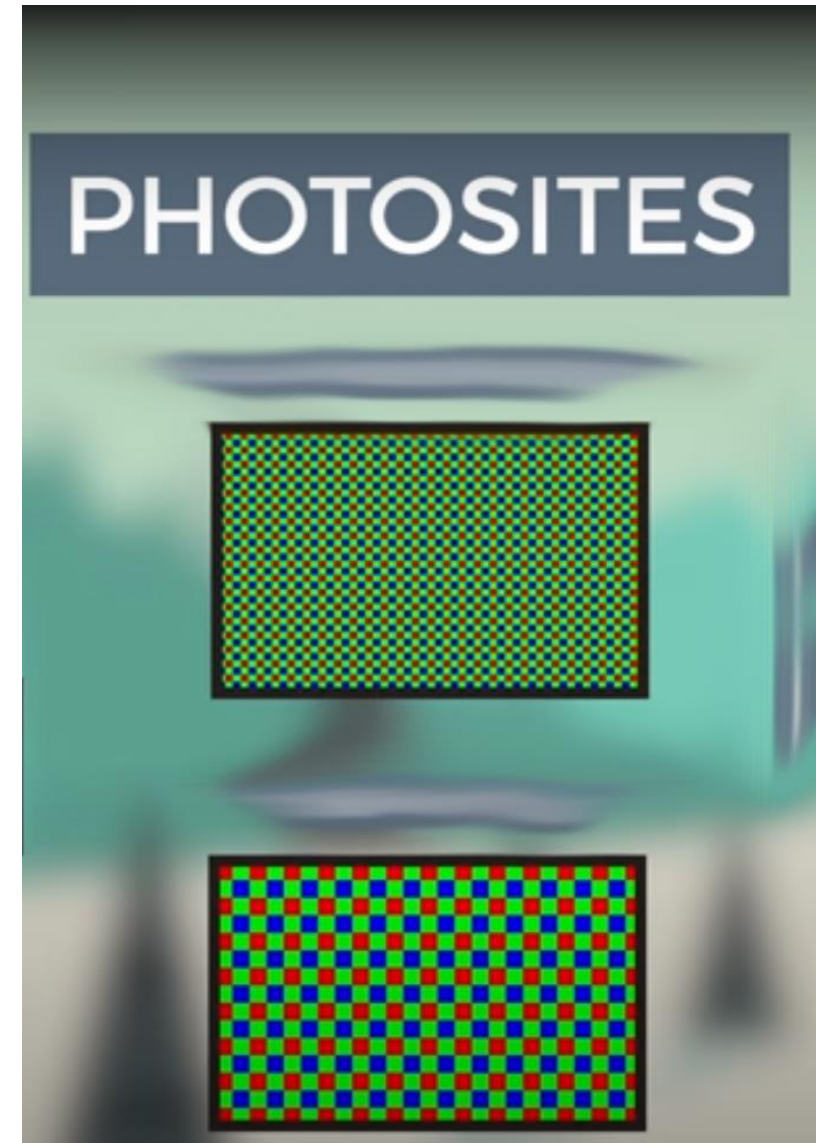
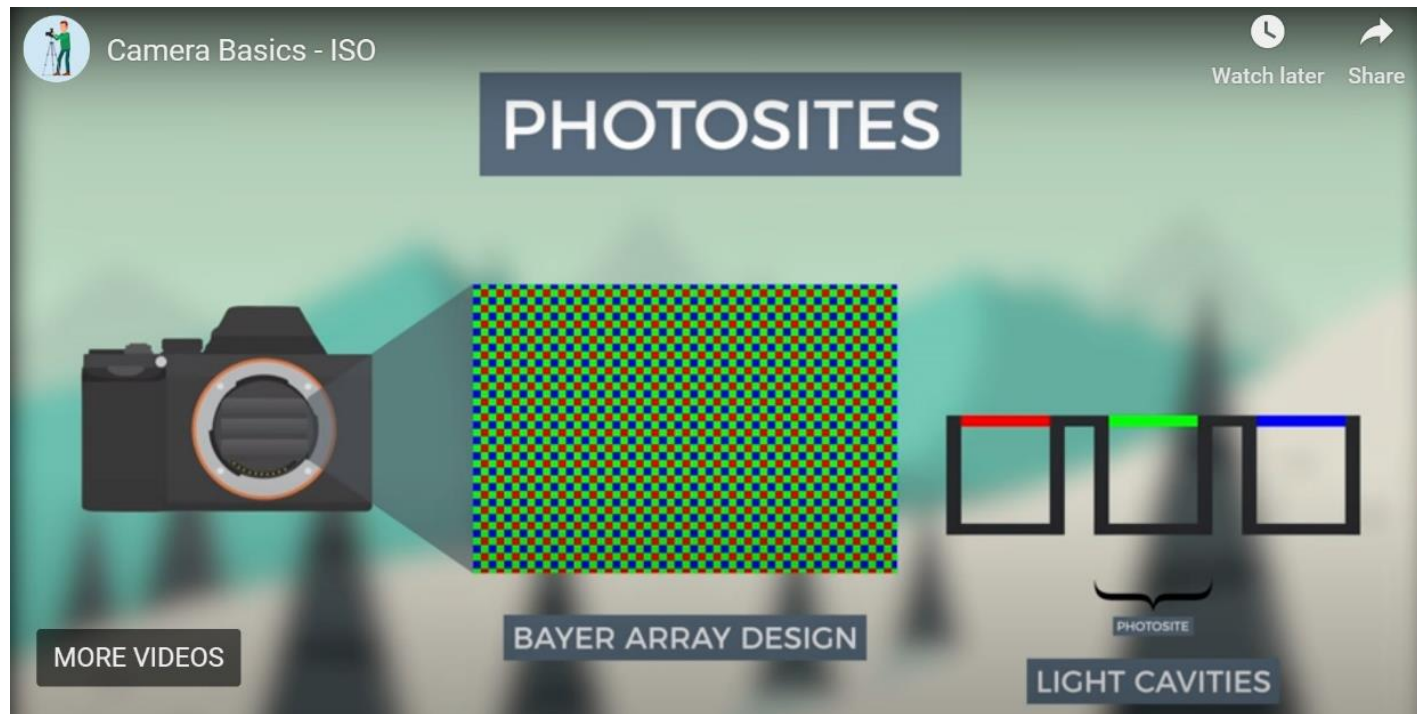


Silver Halides Create Film Grain



8,000X magnification

ISO - Digital





100 Speed Film



Kodak Max Versatility Plus 800 Speed



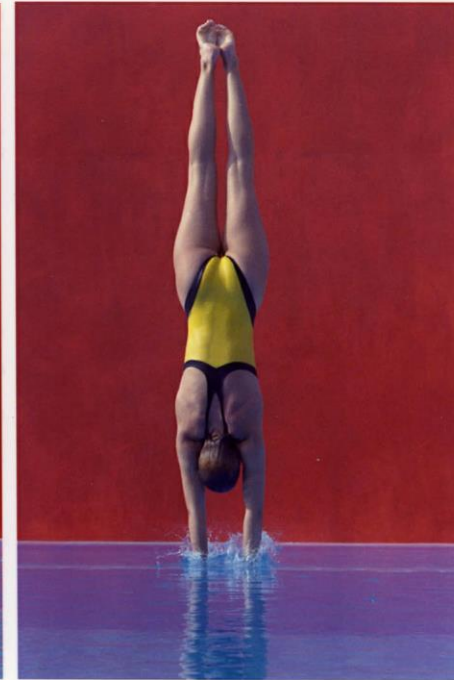
100 Speed Film



200 Speed Film



Kodak Max
Versatility Plus
400 Speed



Kodak Max
Versatility Plus
800 Speed



100 Speed Film



200 Speed Film



Kodak Max
Versatility Plus
400 Speed



Kodak Max
Versatility Plus
800 Speed

How does ISO affect print quality

- Lower ISO films/digital settings are more dense, and thus are less grainy/noisy when made into a print
- Higher ISO film/digital settings are less dense, and thus can be more grainy/noisy when enlarged

High ISO (3200)

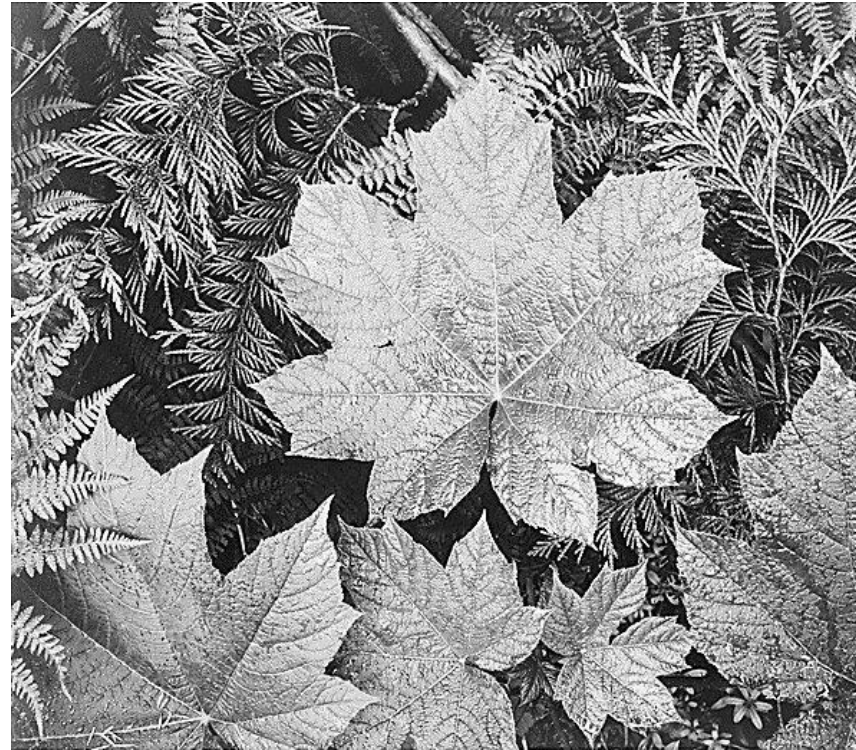


Low ISO (maybe 64 ISO)



Ansel Adams

Low Density High Density



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



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

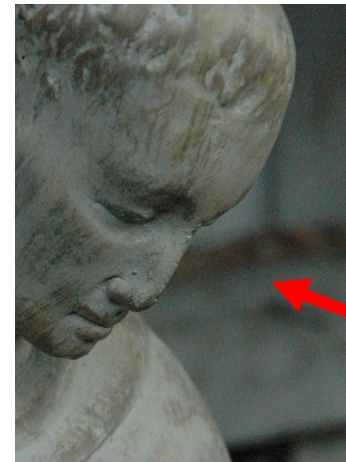
(aperture setting
remains constant)



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



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

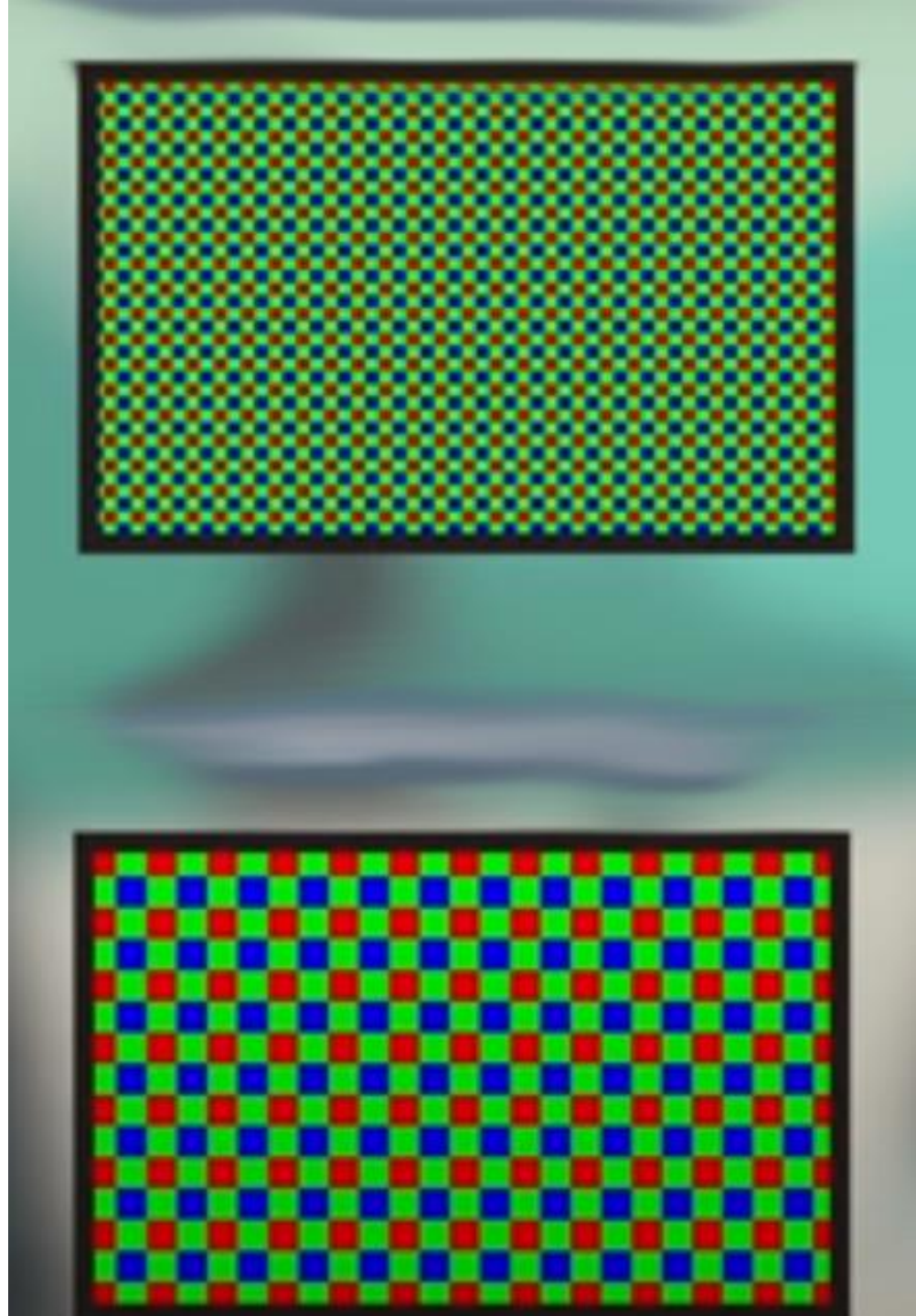
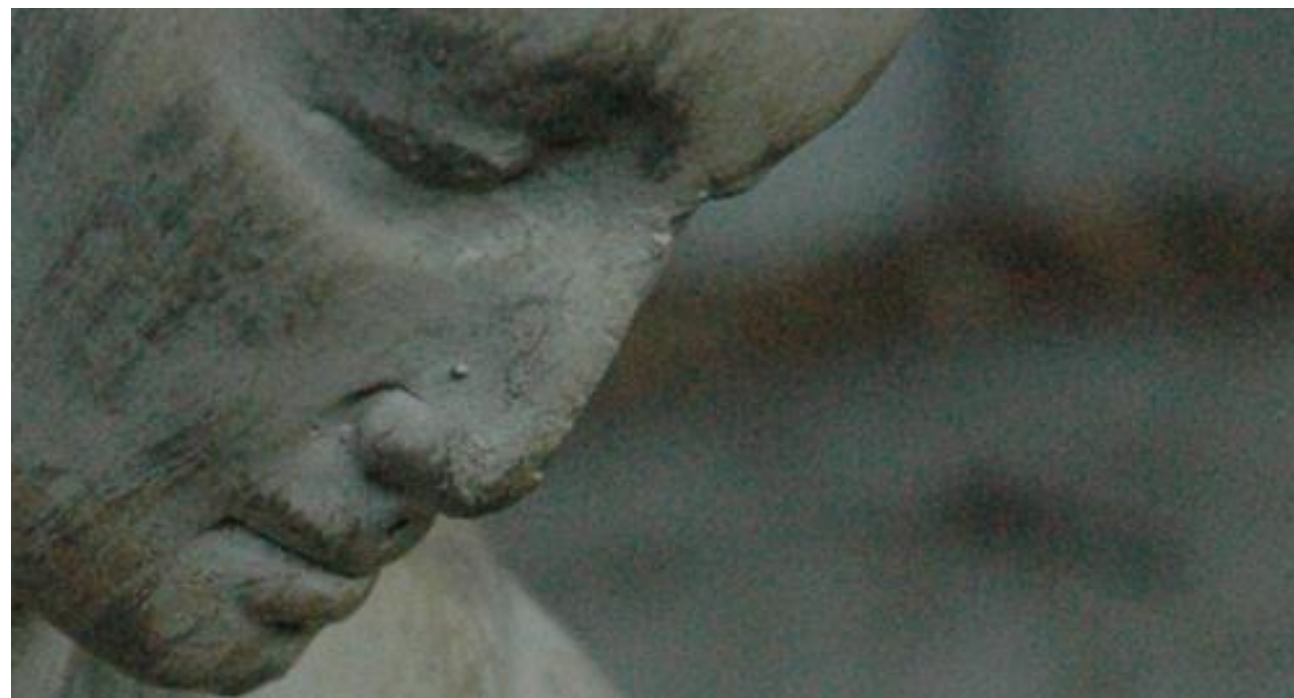


f/5.0 @ 1/400 (quite fast)
ISO 1600 (much higher)

More noise present

Noise







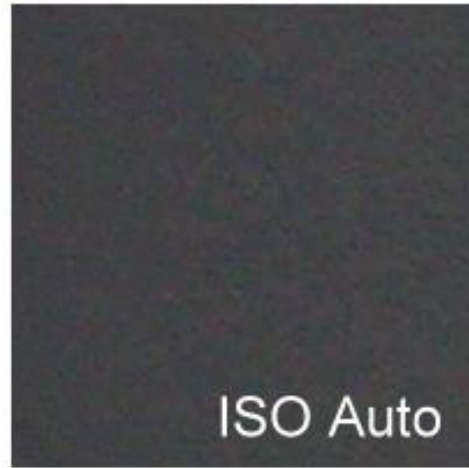
ISO 80

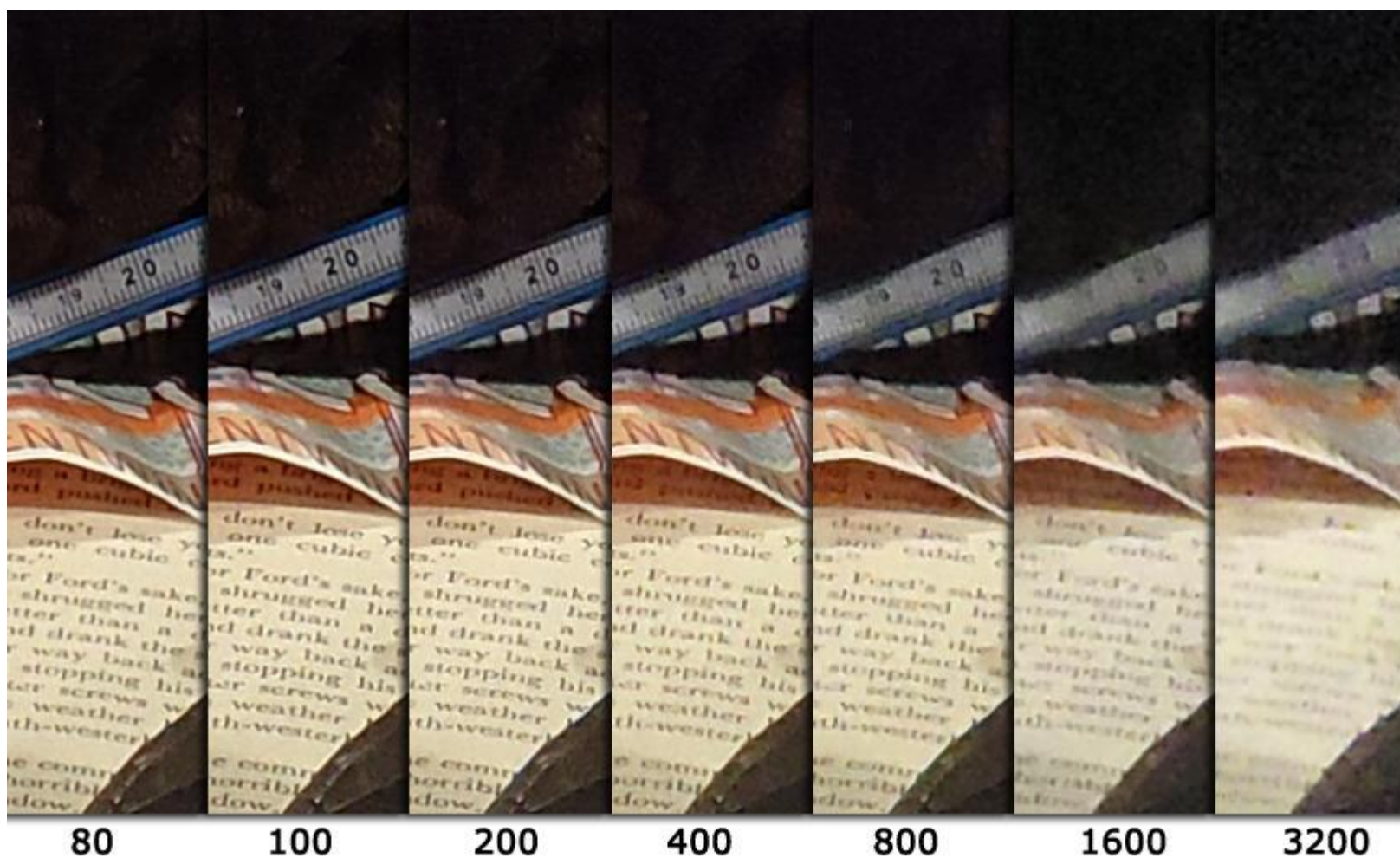


ISO 800



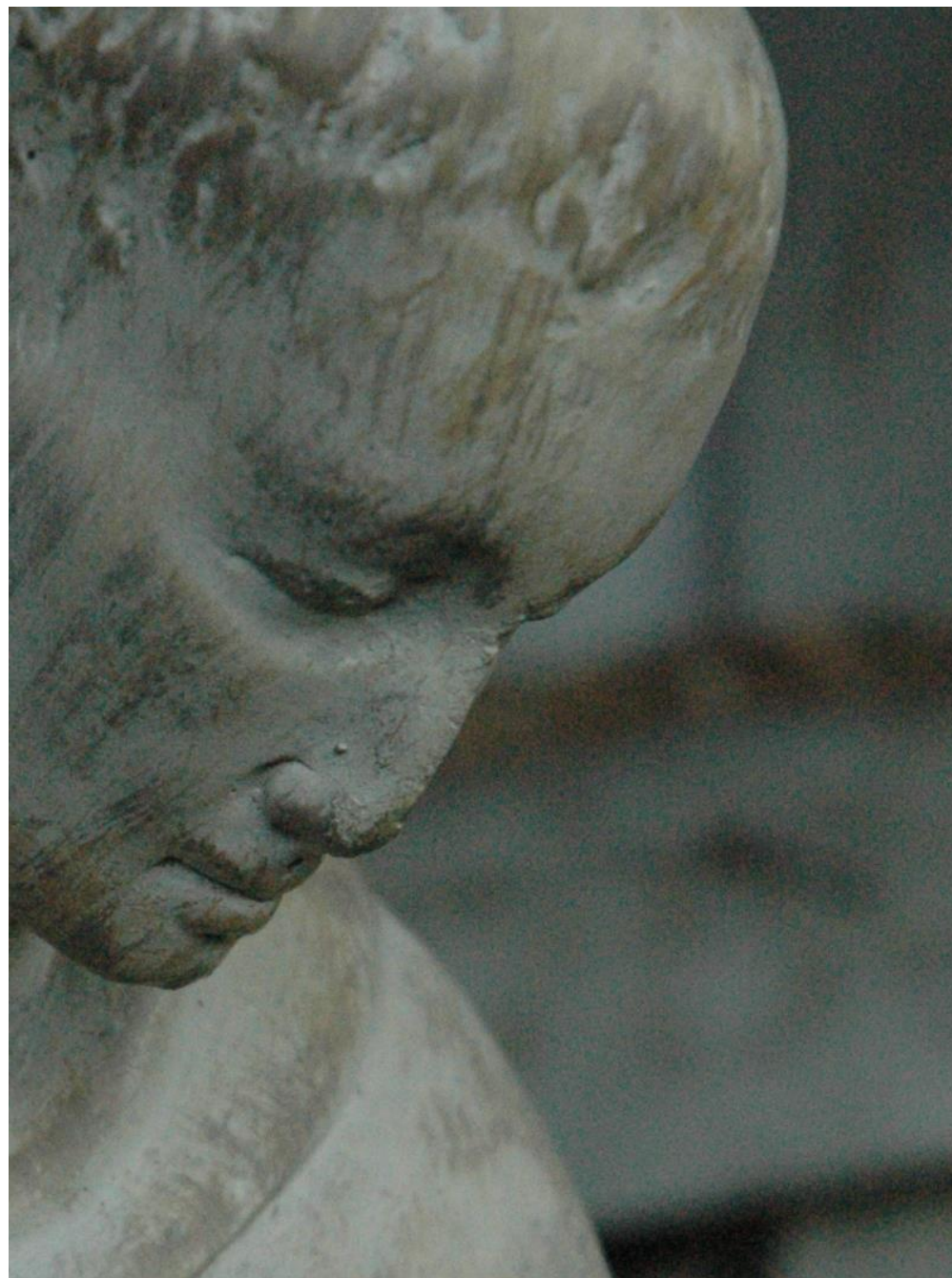
ISO 1600



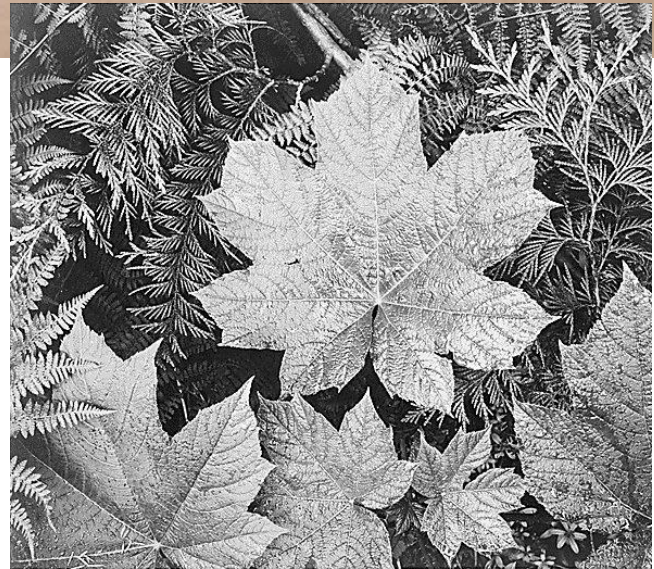




Grain



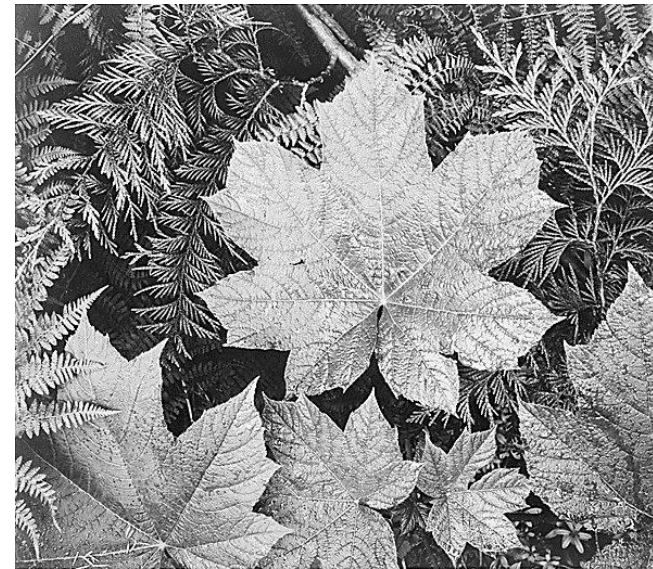
Noise



High ISO - Sand



Low ISO - Clay



**High ISO (3200) is less
dense like a raised
doughnut**



**Low ISO (100) is
more dense like a
cake doughnut**

