THE CAMERA

IN DIGITAL VIDEO PRODUCTION

FILM PRODUCTION PROCESS:
A BROAD OVERVIEW

DEVELOPMENT

- Ideation
- Research
- Script Writing

PRE-PRODUCTION

- ***Storyboarding*** **:** Plan out shots, scenes, camera movement, framing and composition.
- ***Location scouting*** / Designing the mise-en-scene: What location will you use? How will things be arranged in that location? How will the lighting be used to communicate the mood?
- ***Character Design*** / Costuming & Talent scouting / Casting ('character setup')
- ***Treatment writing*** **:** Budget, scene plan, list **equipment**/ *n*ecessary resources and production plan

PRODUCTION

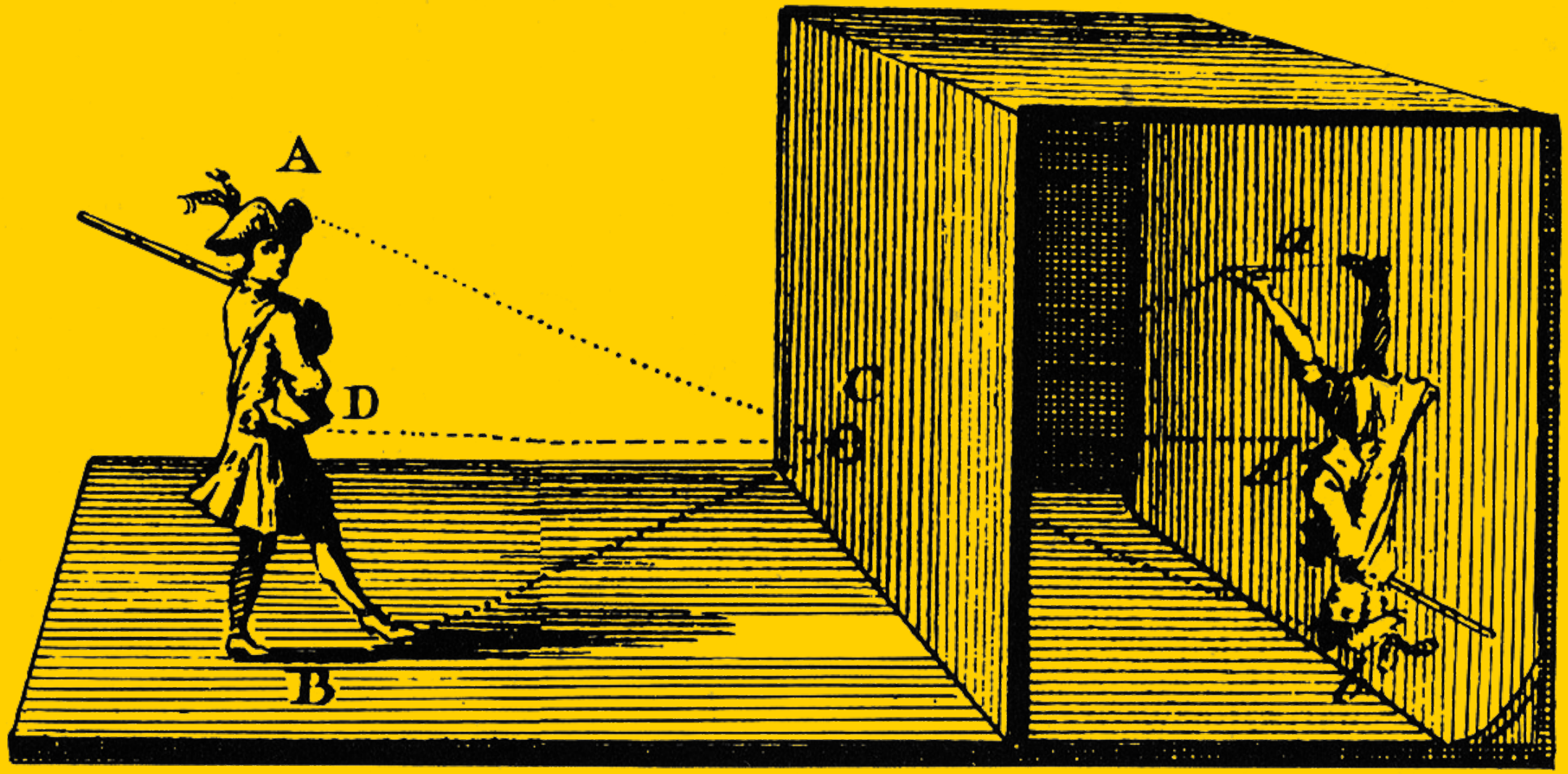
- Recording / Animating
- Performing / Acting / Performance
- Editing

POST-PRODUCTION

- VFX (Visual Effects)
- Colour Grading
- Publishing + Promotion

WRITING WITH LIGHT

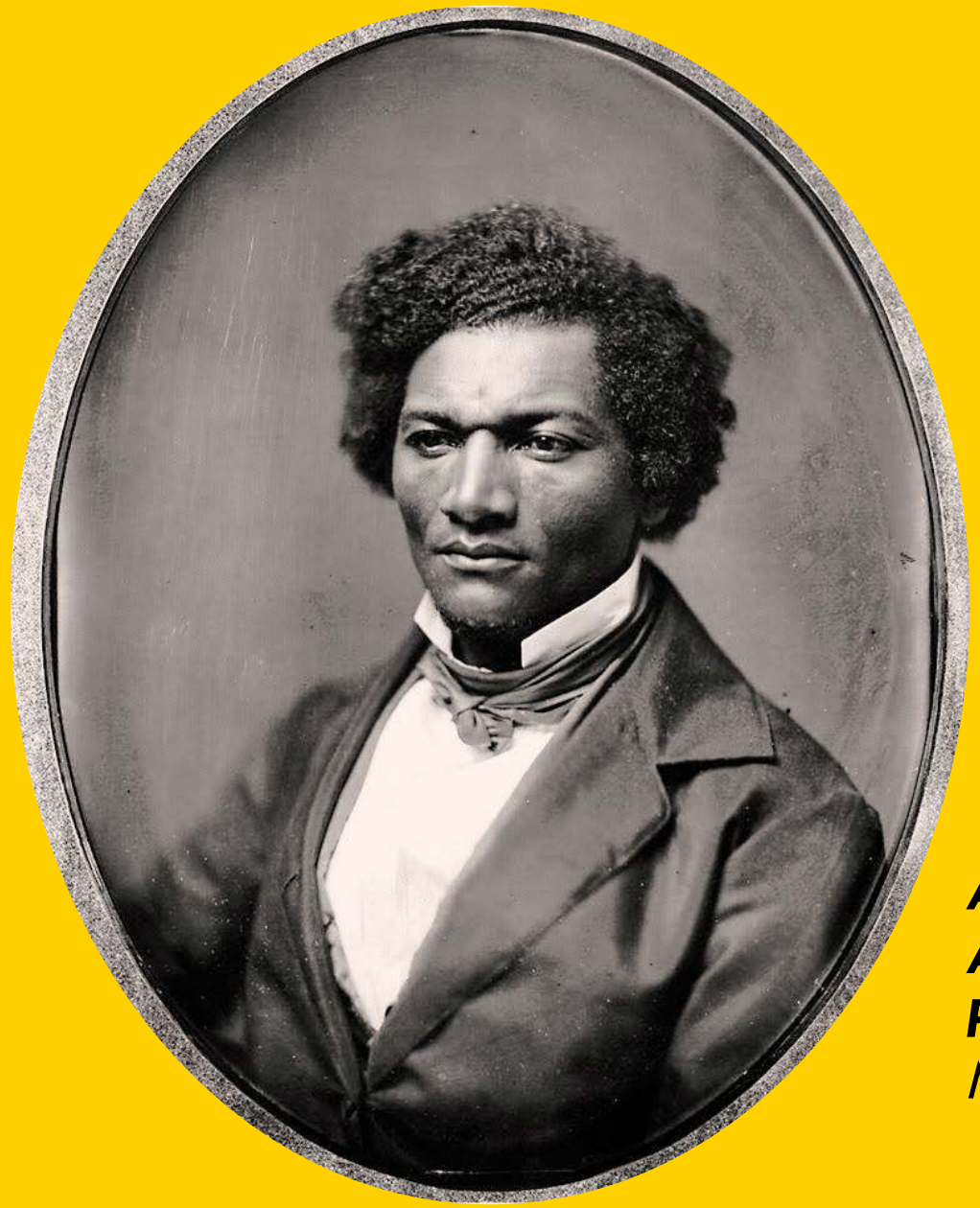
THE PHOTOGRAPHIC CAMERA



CAMERA OBSCURA

16th – 19th Century

A DAGUERREOTYPE CAMERA
Mid 19th Century



A DAGUERREOTYPE OF FREDERICK DOUGLASS, AN ABOLITIONIST & THE MOST PHOTOGRAPHED PERSON IN THE 19th CENTURY

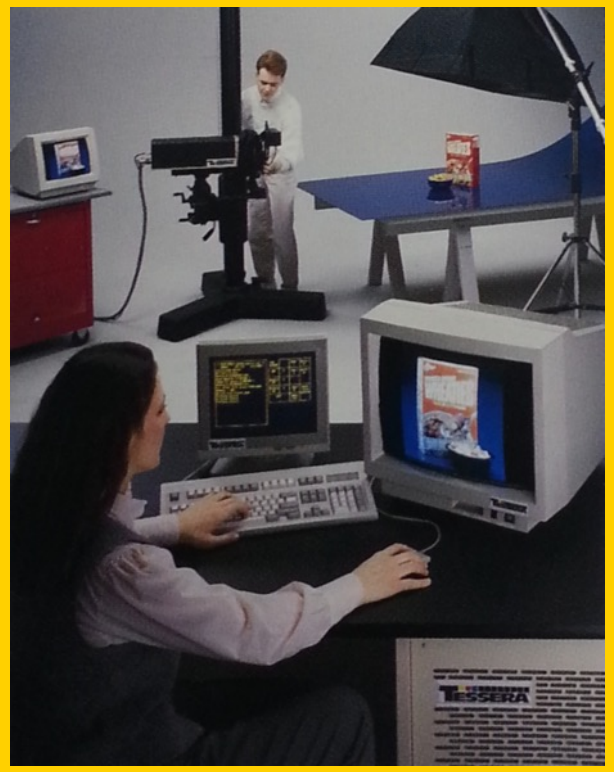
Mid 19th Century

A WET PLATE CAMERA

Mid - Late 19th Century

A KODAK BROWNIE FILM CAMERA

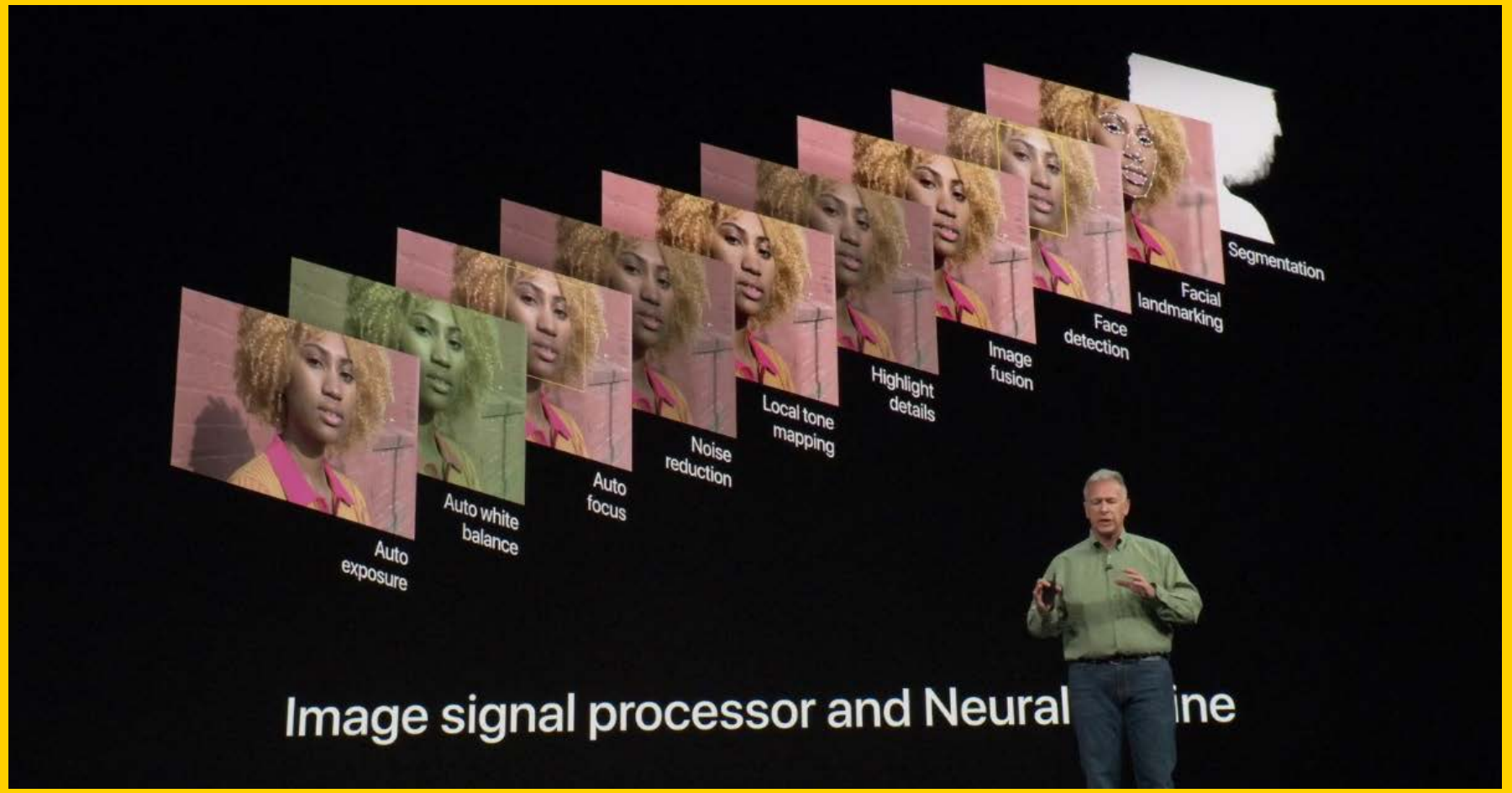
Early 20th Century



THE MEGAVISION TESSERA
THE FIRST COMMERCIAL DIGITAL CAMERA
Late 20th Century

NIKON D5 PROFESSIONAL DSLR
DIGITAL SINGLE REFLEX CAMERA
21st Century

KYOCERA VISUAL PHONE
FIRST COMMERCIAL CAMERA PHONE
21st Century



COMPUTER VISION, CAMERA PHONES & COMPUTATIONAL PHOTOGRAPHY

21st Century

WRITING WITH BYTES

THE VIRTUAL CAMERA

DIFFERENCES

THE VIRTUAL CAMERA

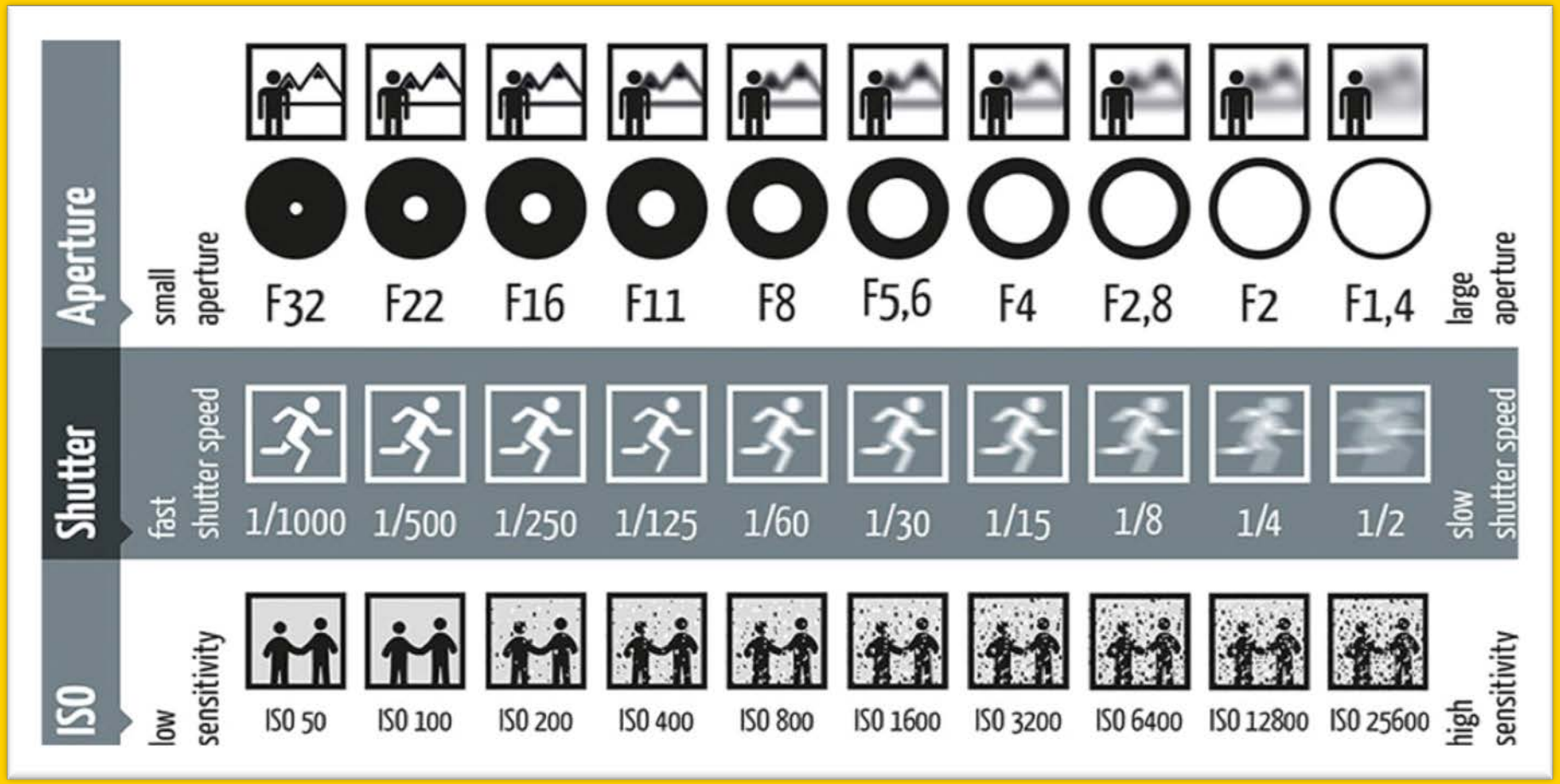
The virtual camera can be placed anywhere in its software program. It is cost effective and can defy the law of physics and gravity. (eg. Clipping/flying through the body of character in a 3D game).

THE PHYSICAL CAMERA

The physical camera responds to physical light. It can record material objects in realtime. This makes it a powerful tool for documenting and capturing moments in the real world.

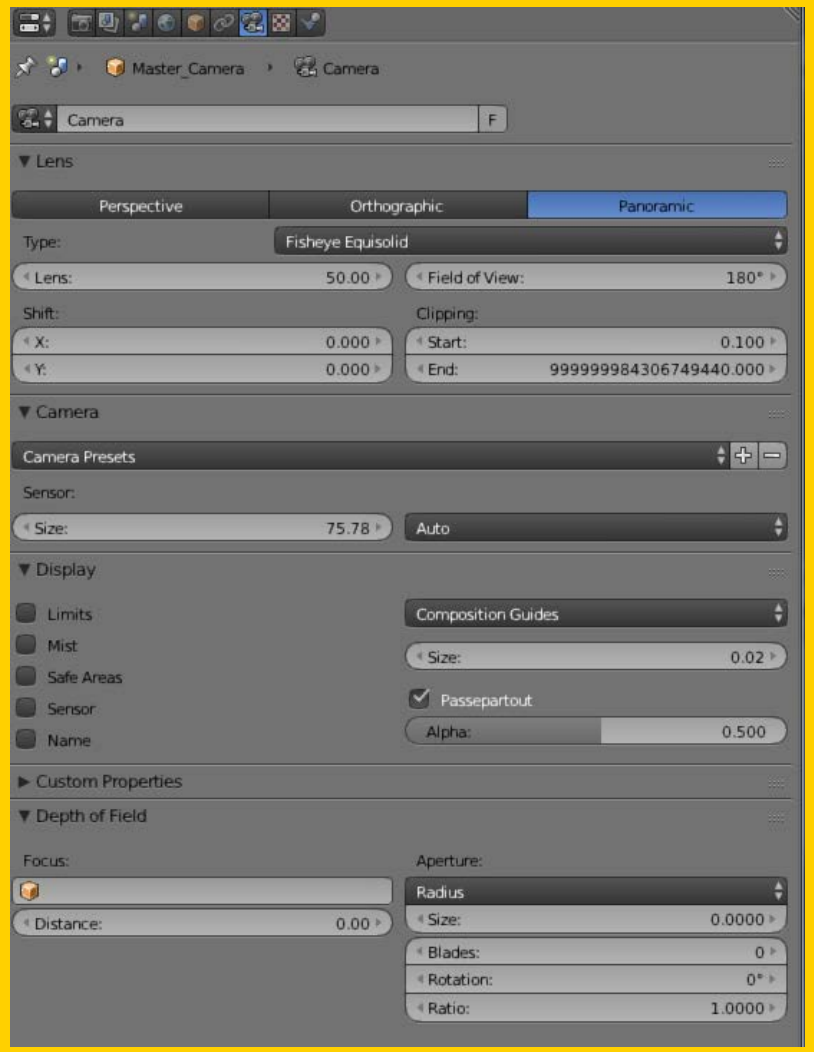
SIMILARITIES

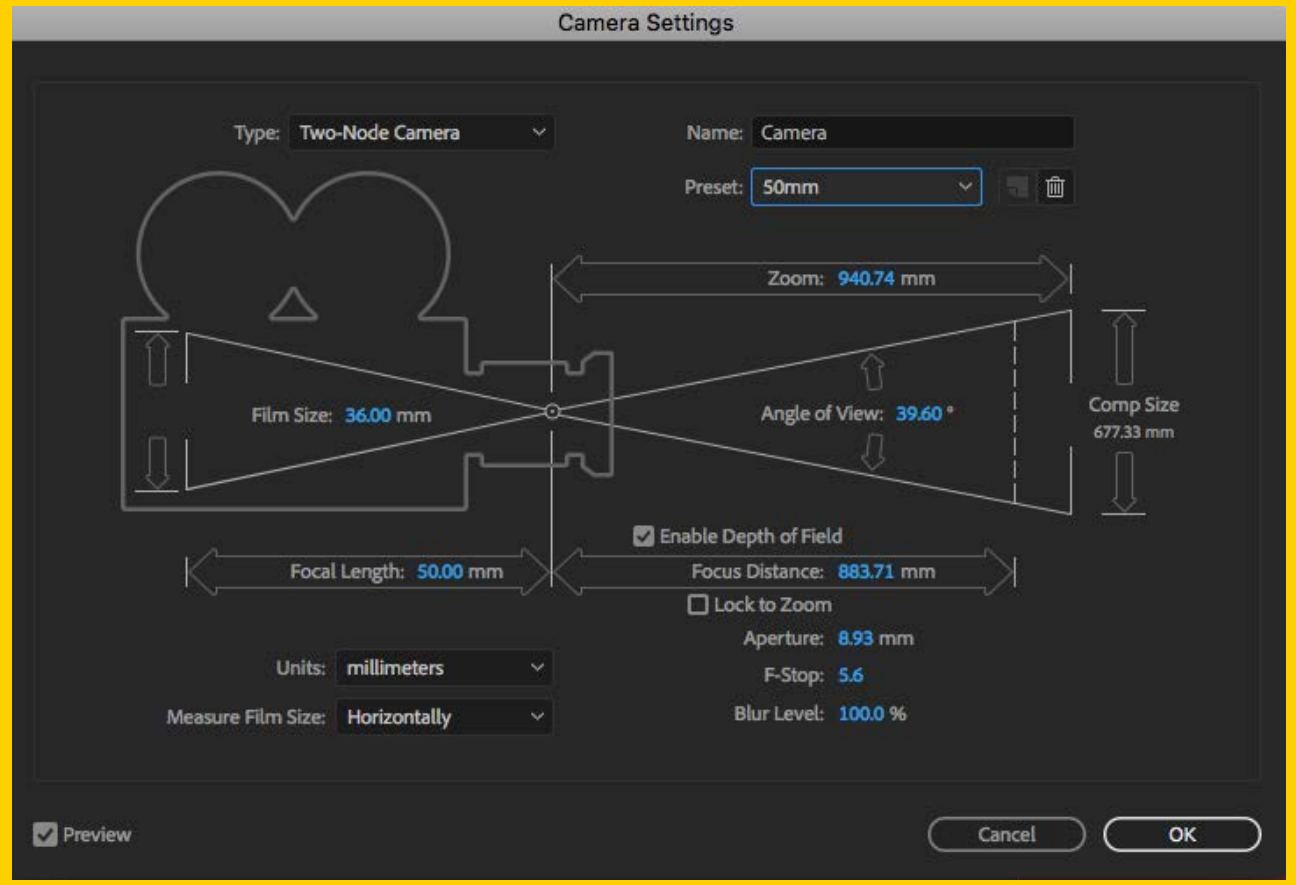
Rudimentary principles of photography and film making apply to both physical and virtual cameras.



BASIC CAMERA (DSLR) SETTINGS

Aperture & Focal Length, Shutter Speed, ISO





BASIC VIRTUAL CAMERA SETTINGS IN BLENDER & AE

Aperture & Focal Length, Shutter Speed, ISO

FRAMING AND COMPOSITION

SHOT SIZE

LEARNABOUT film

EXTREME LONG SHOT XLS

VERY LONG SHOT VLS

LONG SHOT LS

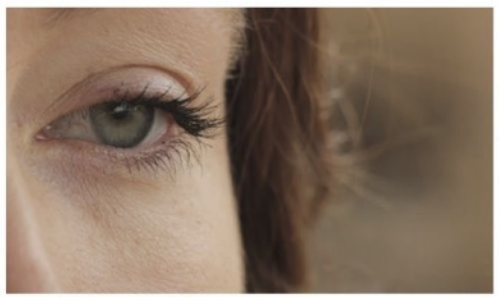
MEDIUM LONG SHOT MLS

MID SHOT MS

MEDIUM CLOSEUP MCU

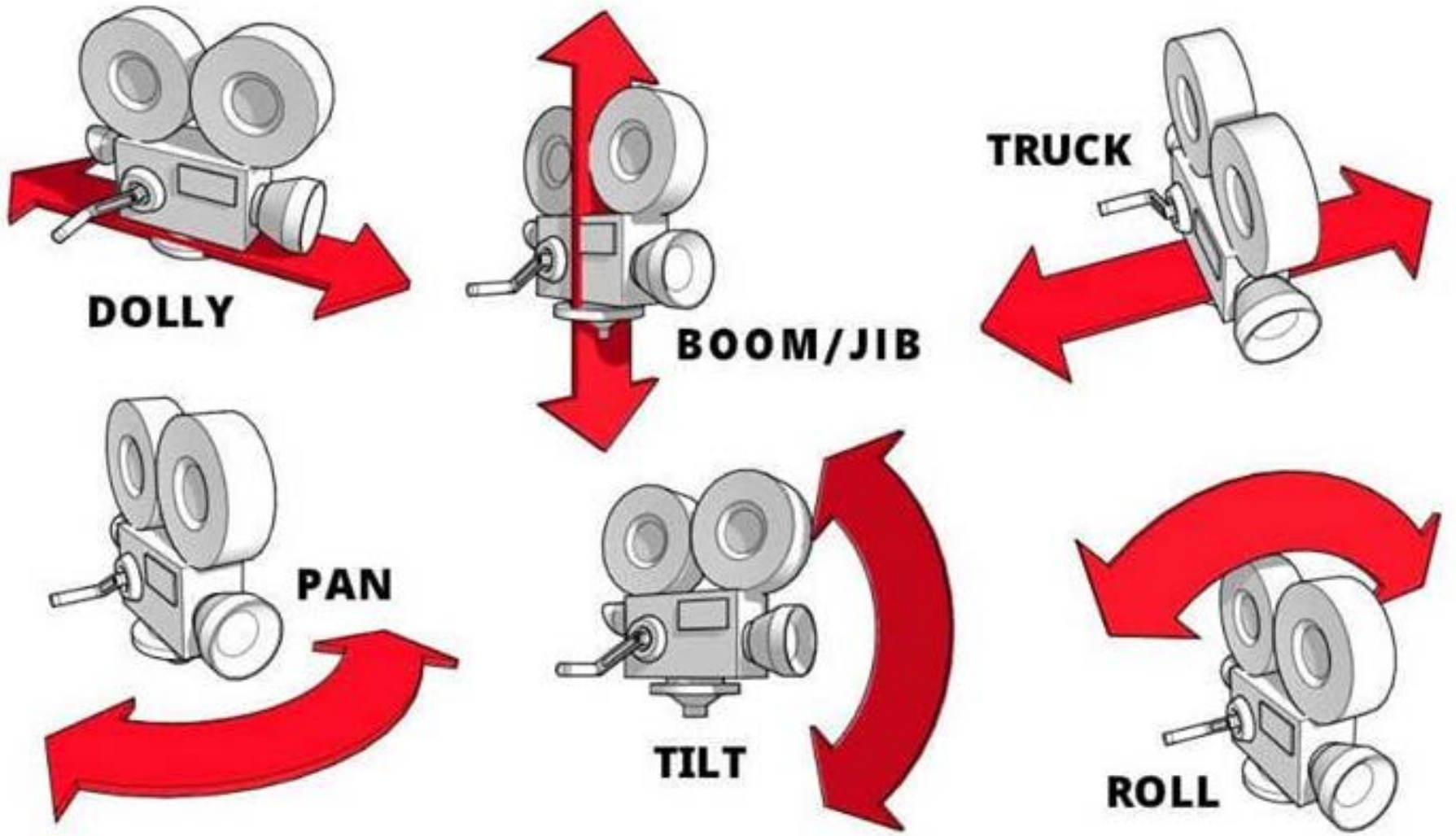
CLOSEUP CU

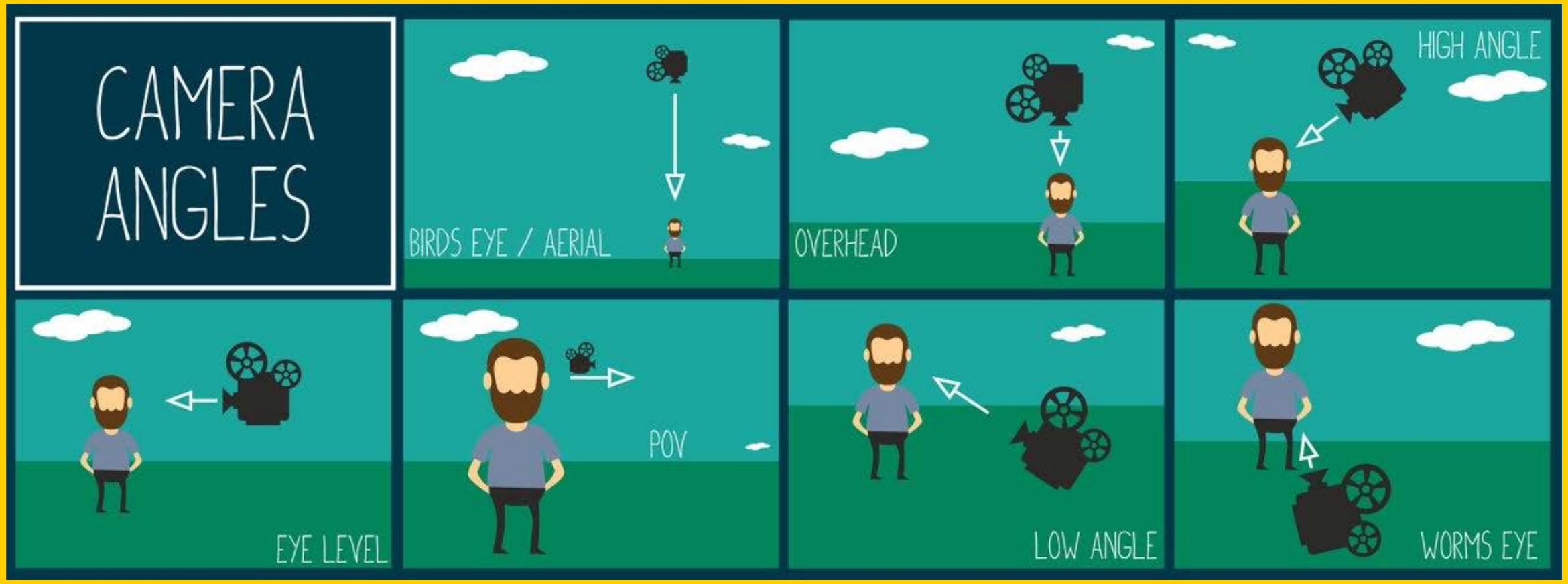
BIG CLOSEUP BCU



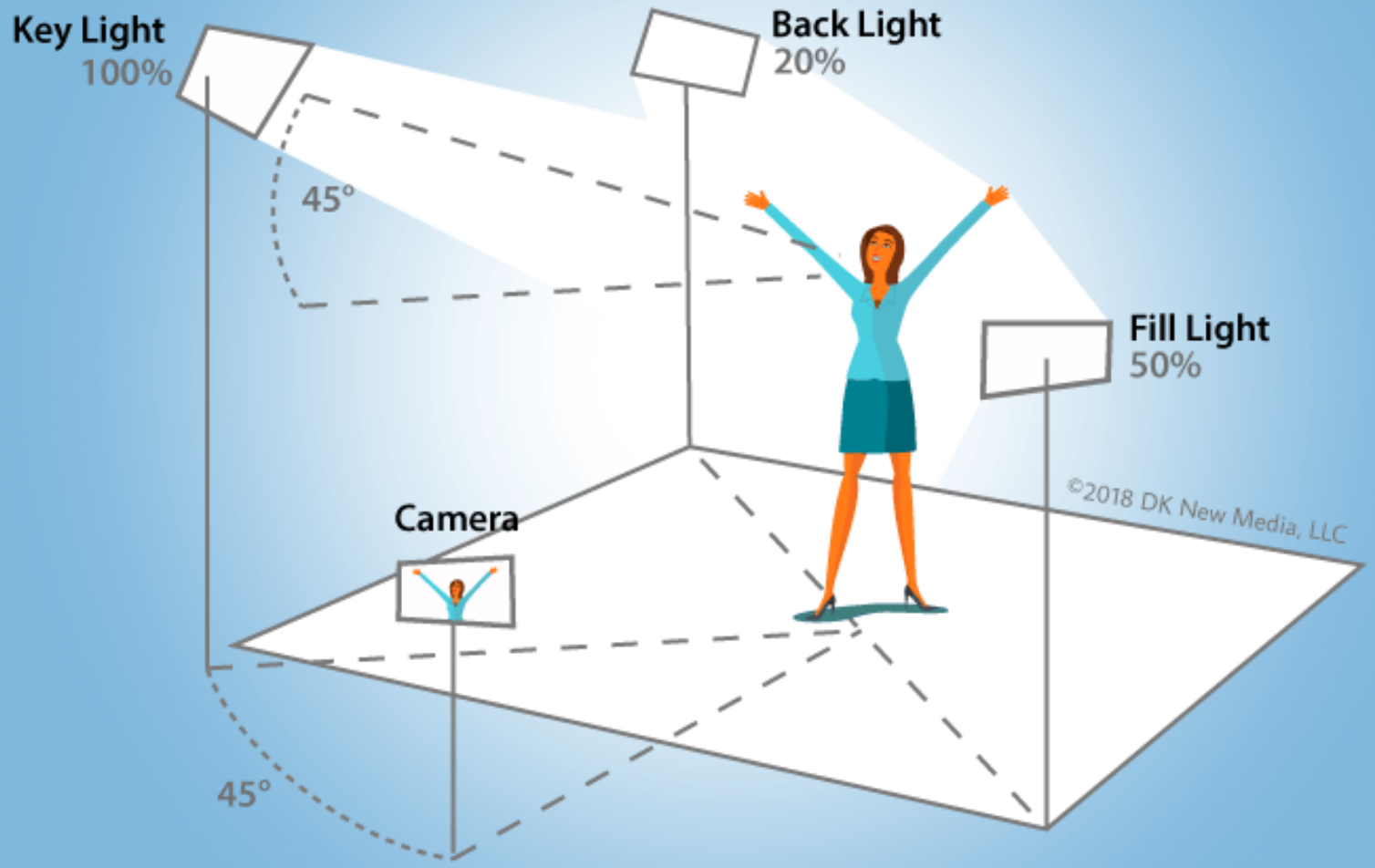
EXTREME CLOSEUP ECU

CAMERA MOVEMENT GUIDE




CAMERA ANGLES
BIRDS EYE / AERIAL
OVERHEAD
HIGH ANGLE
EYE LEVEL
POV
LOW ANGLE
WORMS EYE

THREE-POINT LIGHTING



LIGHTS, CAMERA, AFTER EFFECTS

TASK 4 – 1-2 min. video

- Using the loaned cameras, take three video shots (one medium range, one close up, and one establishing shot) of an interesting or unique aspect of your environment.
- Create a title sequence for your video composition in AE, add background music, and export this as a .mp4 file from Adobe Media Encoder.