



Film Making Workshop I: The shoot

Question of methods: St. John Ambulance vs The Karate Kid



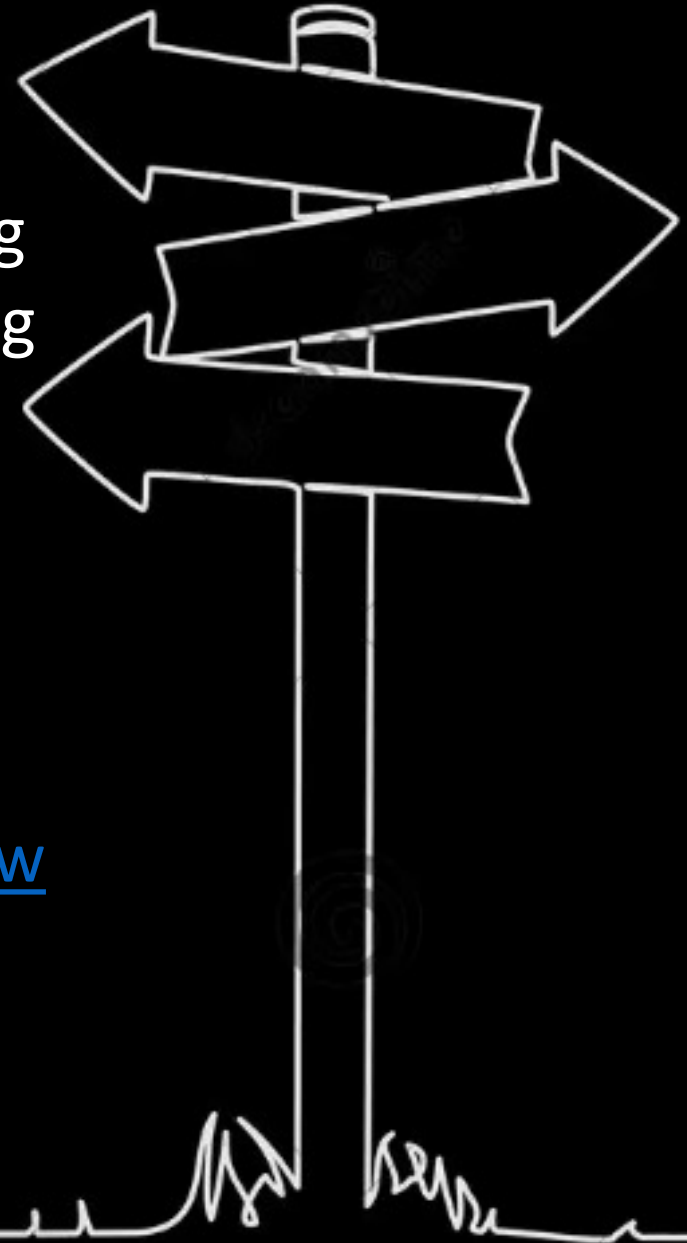
Earning the



- Workshop 1 (2 hours): Film making technologies and techniques (with shoot)
- Workshop 2 (2 hours): Editing and sound design
- Practical Time (4 hours): Film making project(s) with demonstrated incorporation of workshop learning
 - Video
 - Short (a paragraph or two) explanation of technologies and techniques employed and lessons learned

This way home!

- Documenting and promoting a 3D design / printing workshop with confidence and community building objectives
- 4K resolution, 30 FPS, landscape orientation
- Audience: students, with a focus on international
- Multi voice narration (overdub)
- An iteration of:
<https://youtu.be/dzGSczjkxjA?si=bZSFISNtDOXgawmX>





WELCOME TO YFC!

Green Screen
Static/tripod

"You've come from afar full of ambition and hope."

Green Screen Static/tripod

“And like any adventure in New Brunswick, there will be sunshine, and there will be snow.”

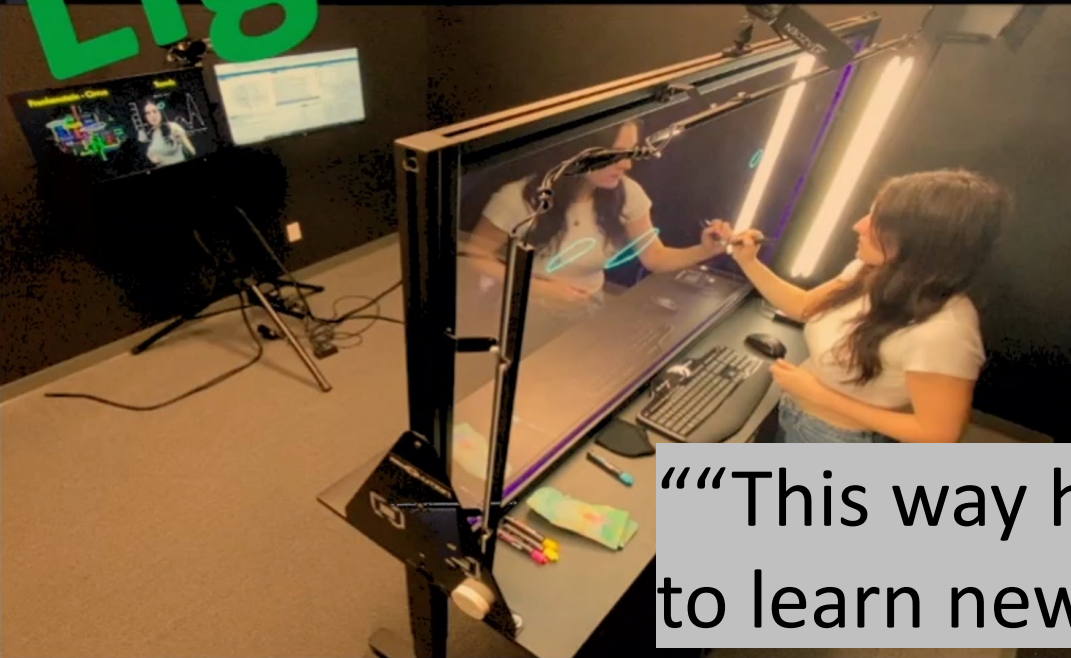




FilmMaking Studio Green Screen Pull back/gimble

“Thankfully, you won’t be alone.”

LightBoard



““This way home” was designed to bring us together to learn new skills and share stories.”



Data Visualization Lab
Low orbital + Close up + B-roll

"About where we come from and who we are."



Orbit around / crane poll + medium/ close-up of faces and hands

“Learn how to 3D design a directional sign to your hometown and add it to the signpost in the Harriet Irving Library Research Commons.”



Ensemble finale / pullback

“Because an adventure like this is to be celebrated and shared.”

For each shot today:

- 4K, 30FPS baseline (min. 60FPS for slo-mo), landscape orientation
- Composition (framing, perspective)
- Lens (appropriate to the distance and composition)
- Focus
- Exposure: balanced lighting, low shutter speed (1/60) and just enough ISO
- White balance: auto and lock
- Sound level: mid range gain

Lenses: Perspective and Depth of Field





Frames Per Second determine motion blur



Frames Per Second (frame rate) conventions

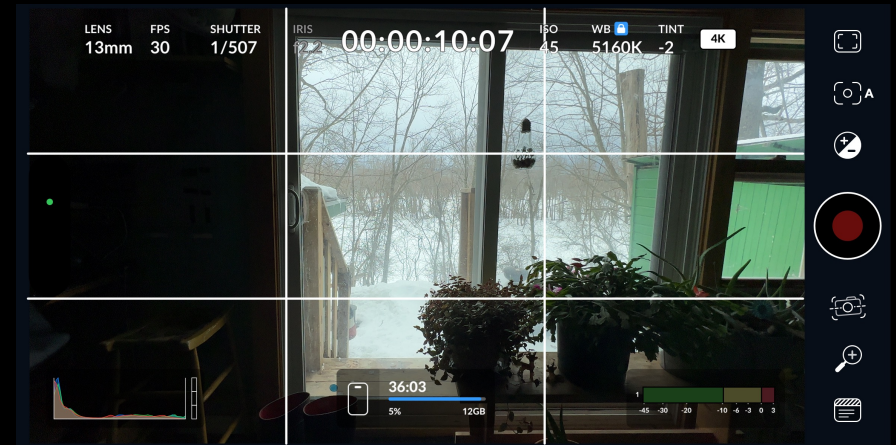
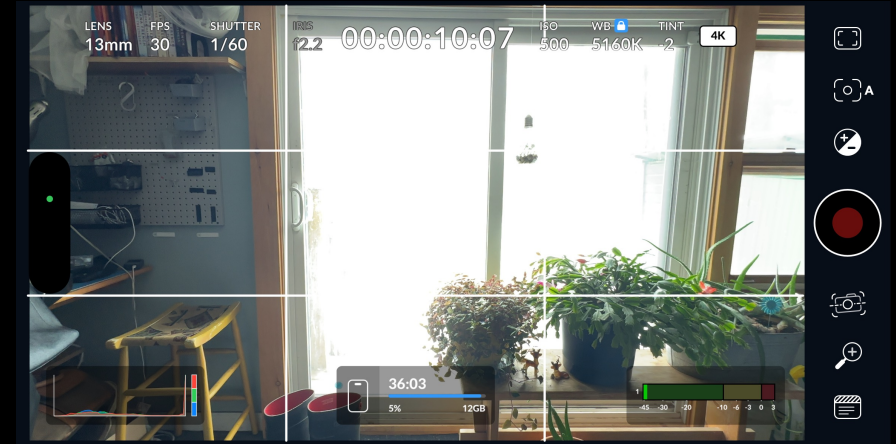
- 24 FPS: Cinematic blur
- 30 FPS: Internet standard
- 60 FPS +: For crisp/jittery action shots OR slow motion (e.g., 120 FPS at $\frac{1}{4}$ speed slots into your 30 FPS project)

Shutter Speed influences exposure and blur (Recommended $1/2 \times \text{FPS}$)



Exposure and Dynamic Range

- Dynamic range:
 - Range of brightness capability/limitations
 - The smaller the lens, the less the dynamic range, resulting in over / under exposure
- Exposure:
 - Amount of light hitting the camera sensor via the lens
 - Controlled by lens size (aperture), shutter speed, and ISO
- Exposure compensate through balanced composition and lighting, or don't, depending on intention



Lighting and exposing for balance

AE/AF LOCK

PANO

PORTRAIT

PHOTO

VIDEO

CINEMATIC



3

2

1.1x

.5



ISO: lens sensitivity to light



Aperture

small
aperture



F32



F22



F16



F11



F8



F5,6



F4



F2,8



F2



F1,4

large
aperture

Shutter

fast
shutter speed



1/1000



1/500



1/250



1/125



1/60



1/30



1/15



1/8



1/4



1/2

slow
shutter speed

ISO

low
sensitivity



ISO 50



ISO 100



ISO 200



ISO 400



ISO 800



ISO 1600



ISO 3200



ISO 6400



ISO 12800



ISO 25600

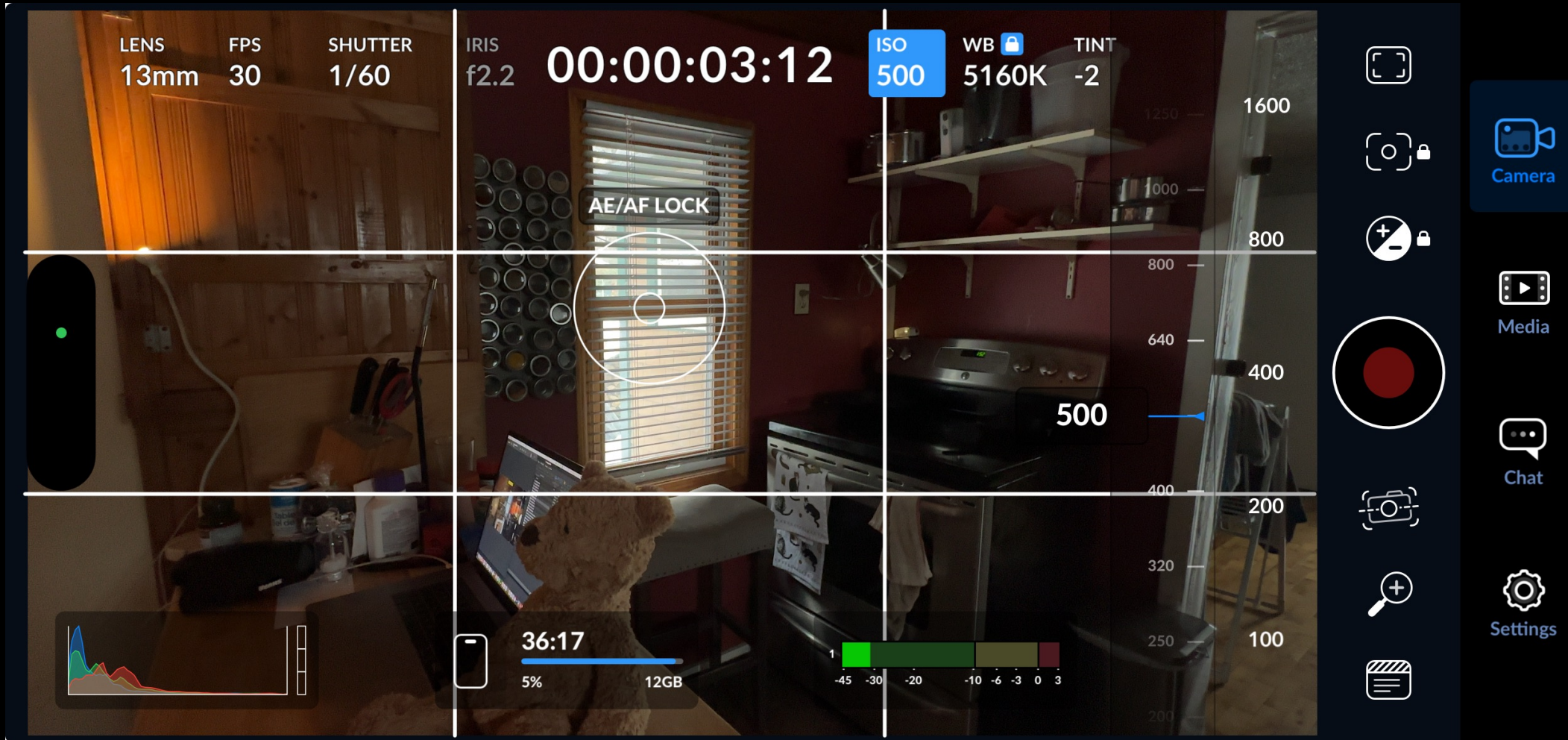
high
sensitivity

Hamburger Fotospots Cheatcard



hamburger-fotospots.de

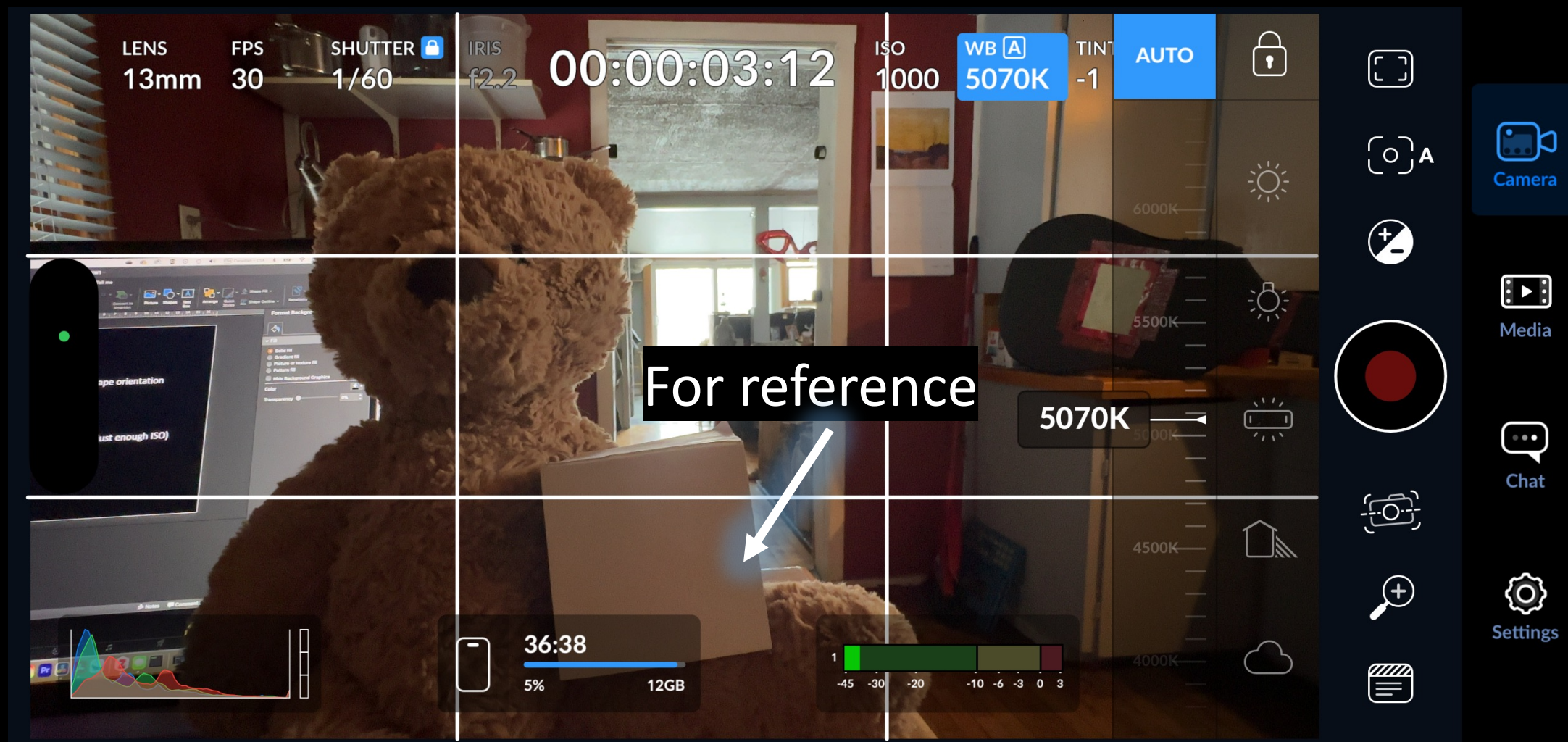
Setting and locking exposure to balance lighting



STANDARD THREE- POINT LIGHTING

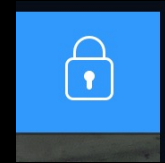


White Balance controls for light/colour cast



White Balance

- All light has a temperature (running from cool/blue to warm/yellow) and is measured in Kelvins (k)
- Adding in a white colour reference to your shot aids in White Balancing (measuring and correcting for light temperature) in camera and editing
- Auto White Balance your shot, then lock it.



Audio Meter / Gain Control

The screenshot displays a video camera's user interface with a central viewfinder showing a teddy bear. The interface includes various technical specifications and controls:

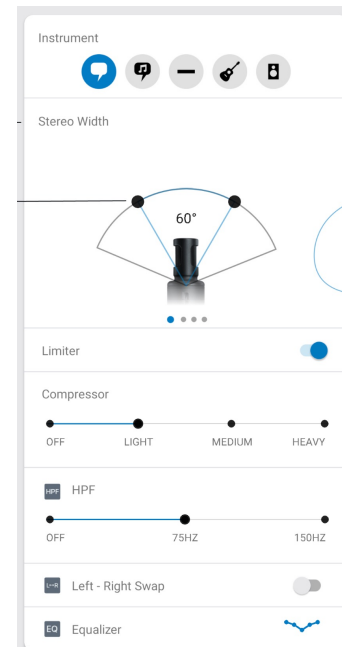
- Top Bar:** LENS 13mm, FPS 30, SHUTTER 1/60, IRIS f2.2, 00:00:03:12 (timecode), ISO 3072, WB 4020K, TINT -6, 4K resolution.
- Audio Section:** A semi-transparent box labeled "Shure MV88+" contains an audio level meter with a scale from -45 to 3. Below it, an "AUDIO GAIN" slider is set to 64%.
- Bottom Bar:** A battery icon, a timer at 36:38, a progress bar, and storage information showing 5% usage and 12GB available.
- Right Sidebar:** A vertical menu with icons for Camera, Media, Chat, and Settings.
- Left Sidebar:** A vertical menu with icons for a green dot, a camera, a magnifying glass, and a document.

Recording audio

- Measured in decibels, topping out at Zero (above which audio is distorted or “clipped”)
- Gain adjusts microphone sensitivity to either boost a weak signal or reign in loudness.
- Metering or visually monitoring volume helps to set appropriate gain
- Aim for setting the gain slider where the loudest recorded volumes do not rise above -10db
- External microphone highly recommended

Sound recording

- Microphones:
 - Directional: lav. / shotgun: isolates specific sound (e.g., the human voice), either attached to camera or to separate capture device
 - Ambient: optional/advanced, for room sound, attached to separate device
- Use a clapperboard (or just clap!) to assist in later synchronizing audio with video during editing.



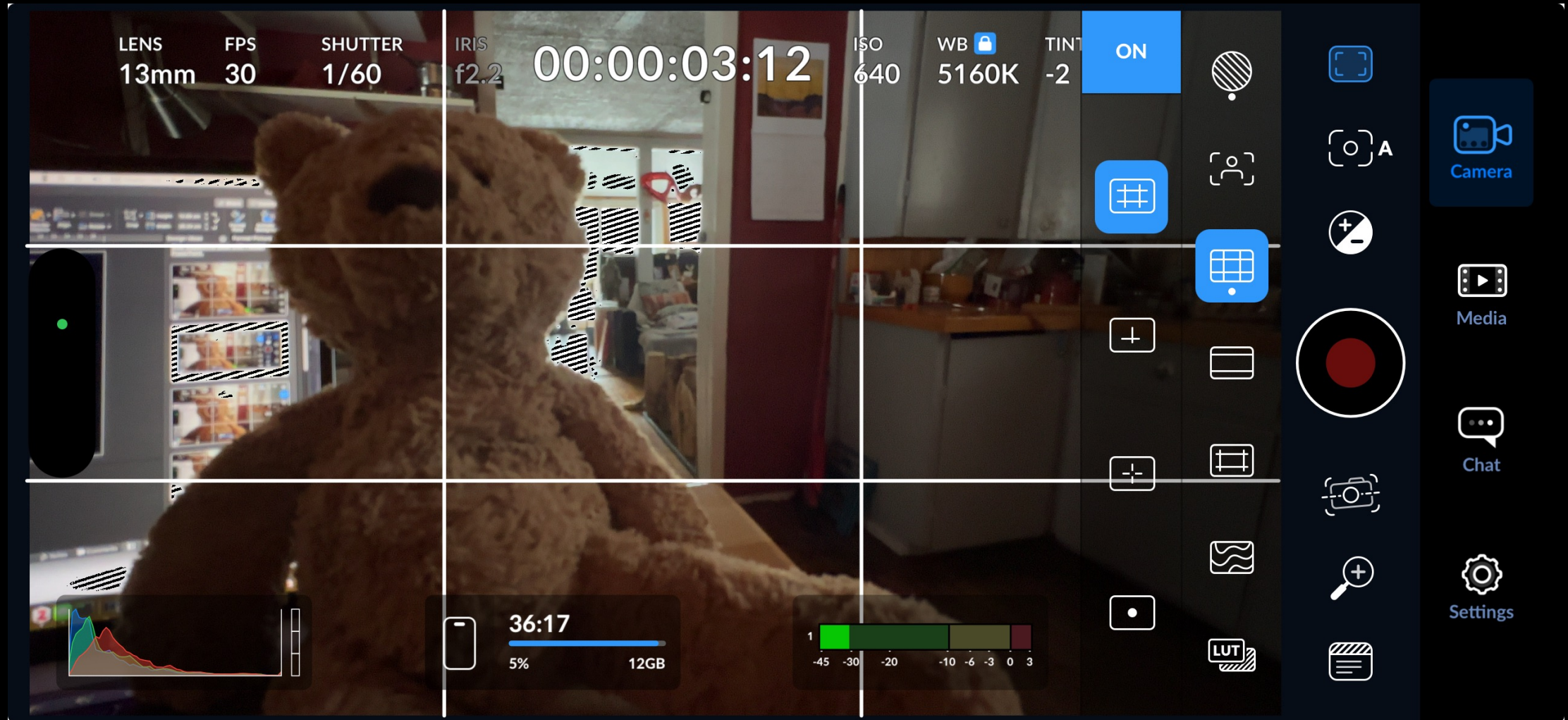
Stabilization to reduce the shakes





Picture stabilization and camera motion

Activating guides (Rule of thirds grid)





Setting focus



00:00:00

AE/AF LOCK

Focal point and Depth of field

PHOTO

VIDEO

SLO-MO

TIME-LAPSE



Your media clips



No project selected - All Clips



iPhone 14 Pro

All Clips

14 Clips



Blackmagic Cloud

Log in to Blackmagic Cloud to
access your projects

Log In



A001_03011230_C038



A001_03011222_C037



A001_02281128_C036



A001_02261320_C033



Camera



Media

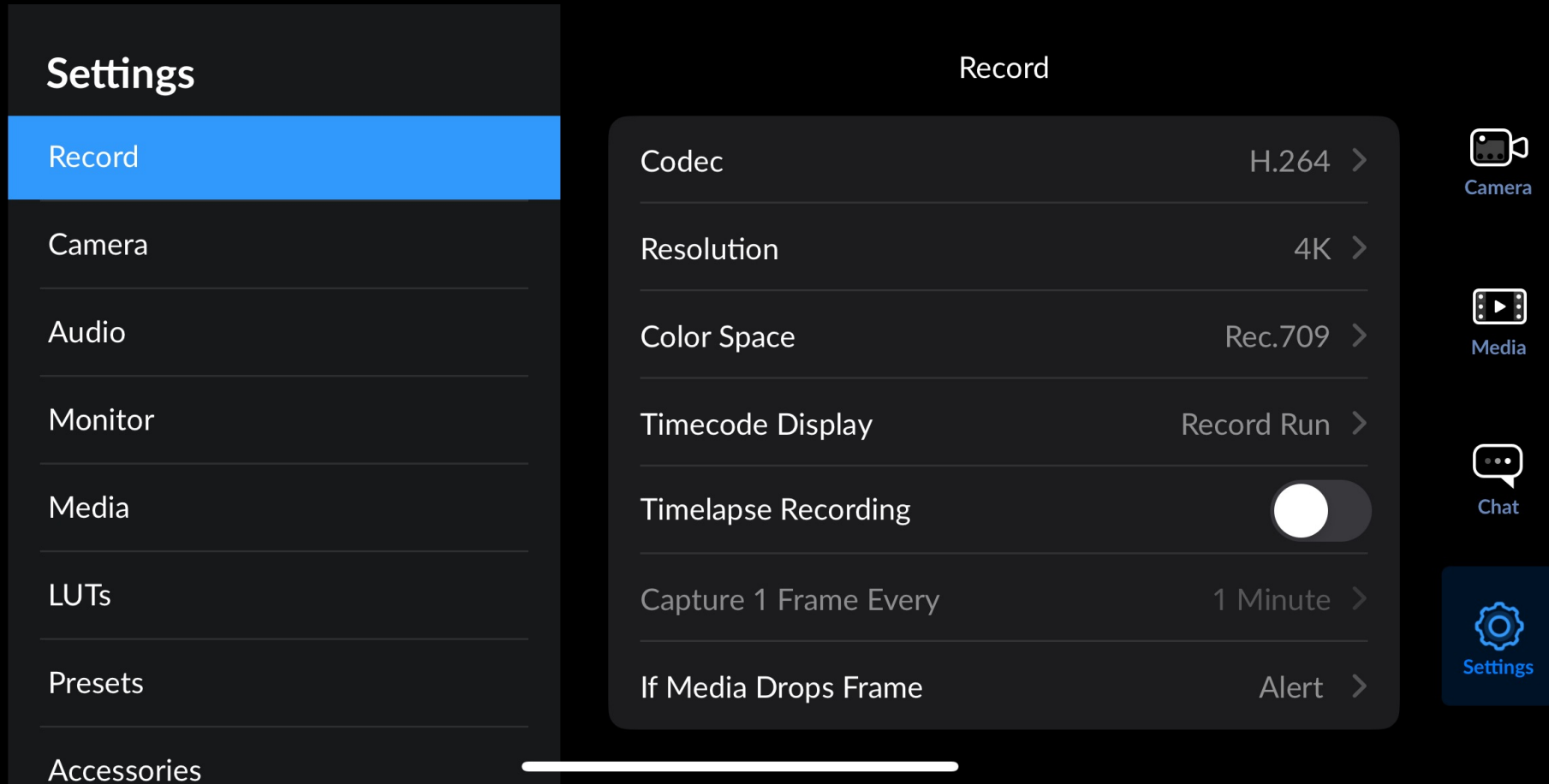


Chat



Settings

Settings: Codec and Color Space



Settings: Camera

Settings

Record

Camera

Audio

Monitor

Media

LUTs

Presets

Accessories

Camera

Enable Vertical Video

Trigger Record Indicator

Use Volume Button to Trigger Record

Lock White Balance on Record

Shutter Measurement

Flicker Free Shutter Based On

Lens Correction

Anamorphic De-Squeeze



None >



Speed >

50Hz >



None >



Camera



Media



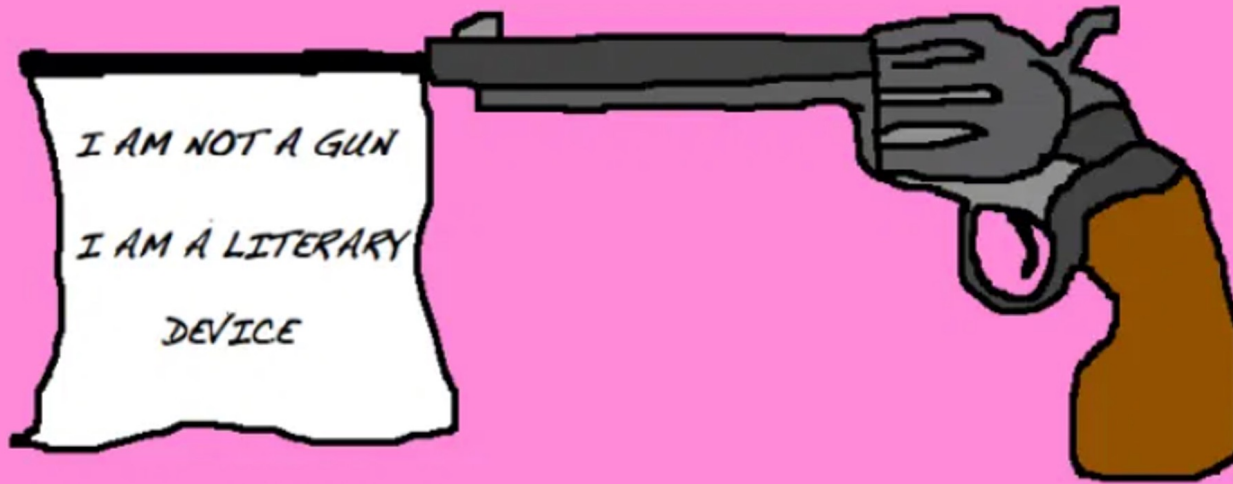
Chat



Settings



Film Techniques: The Language of Film



Language of film: compositional techniques

Form follows function

- **Shots / Frames:** Video clips with (hopefully) deliberately chosen perspectives and movements to craft a narrative.
- **Composition / Blocking:** Determining the perspective, position and **movements** of subjects and objects in relation to one another.
- **Representations / B roll:** Shots that are related to the main action of a given scene and can be woven in during editing to serve the narrative.

Crafting a narrative with shot choices

Facets of a story	Shot options
Where (environment)	Establishing (often Wide Angle) shot
Who (the subject)	Close Up shot
What (drama/actions performed by or on subject)	Medium shot
When (time period, at a point in a given story)	-Continuous shot or long take (representing space + time), - Close Up of symbolic objects (sun, moon, clock...) or actions (walking feet, reaching for a door knob...) -see <i>Pacing (cuts)</i>
Why (internal decisions making of the subject, or emotional effect upon)	Extreme Close Up , sequence of other shots explaining back story

Planning shots with story/editing in mind



Video editing interface showing a timeline and a storyboard.

Timeline: 01:00:08:04

Storyboard:

- Wide Angle:** 01:00:00:00 - 01:00:06:00. Image: IMG_5903.JPG
- Medium:** 01:00:06:00 - 01:00:12:00. Image: IMG_5907.JPG
- Close Up:** 01:00:12:00 - 01:00:18:00. Images: IMG_5934.JPG, IMG_5908.JPG, IMG_5909.JPG

Clips: V1 Video 1, 5 Clips

Composing shots for depth

(Bonus: Shot Blocking)

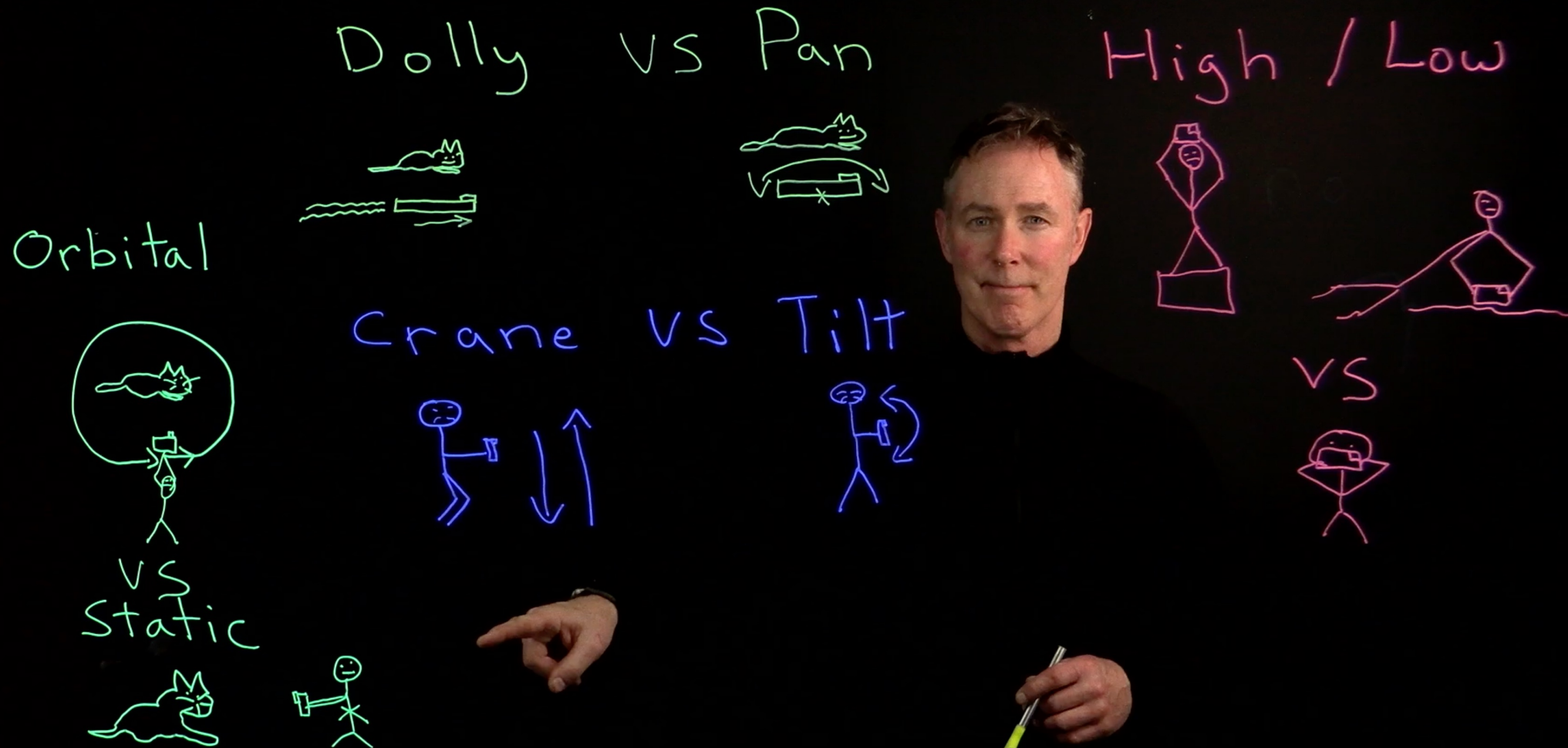
Background

Midground

Foreground



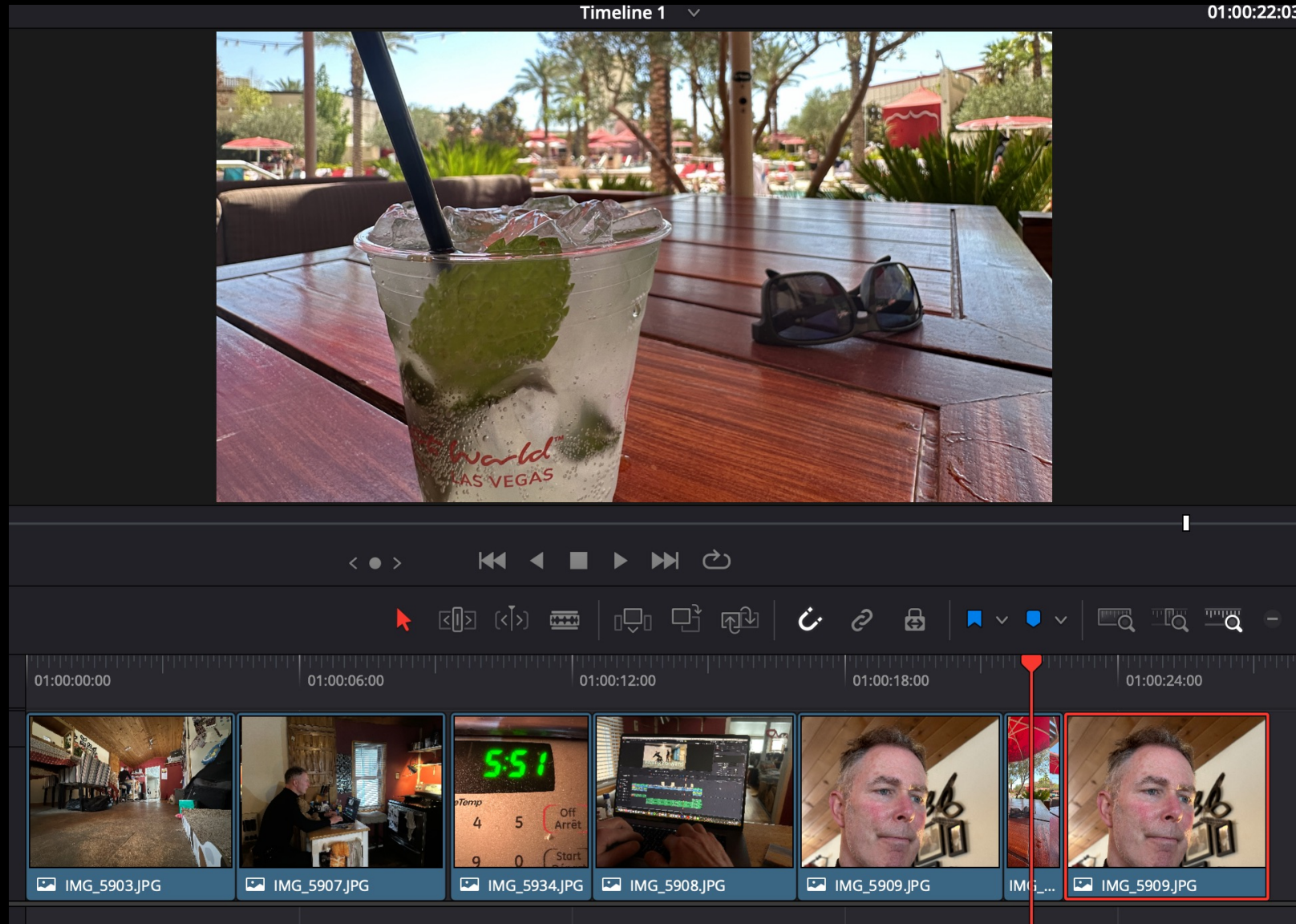
Shot movements / perspectives: Avoiding the way we usually see everything



Camera Movement and Effect

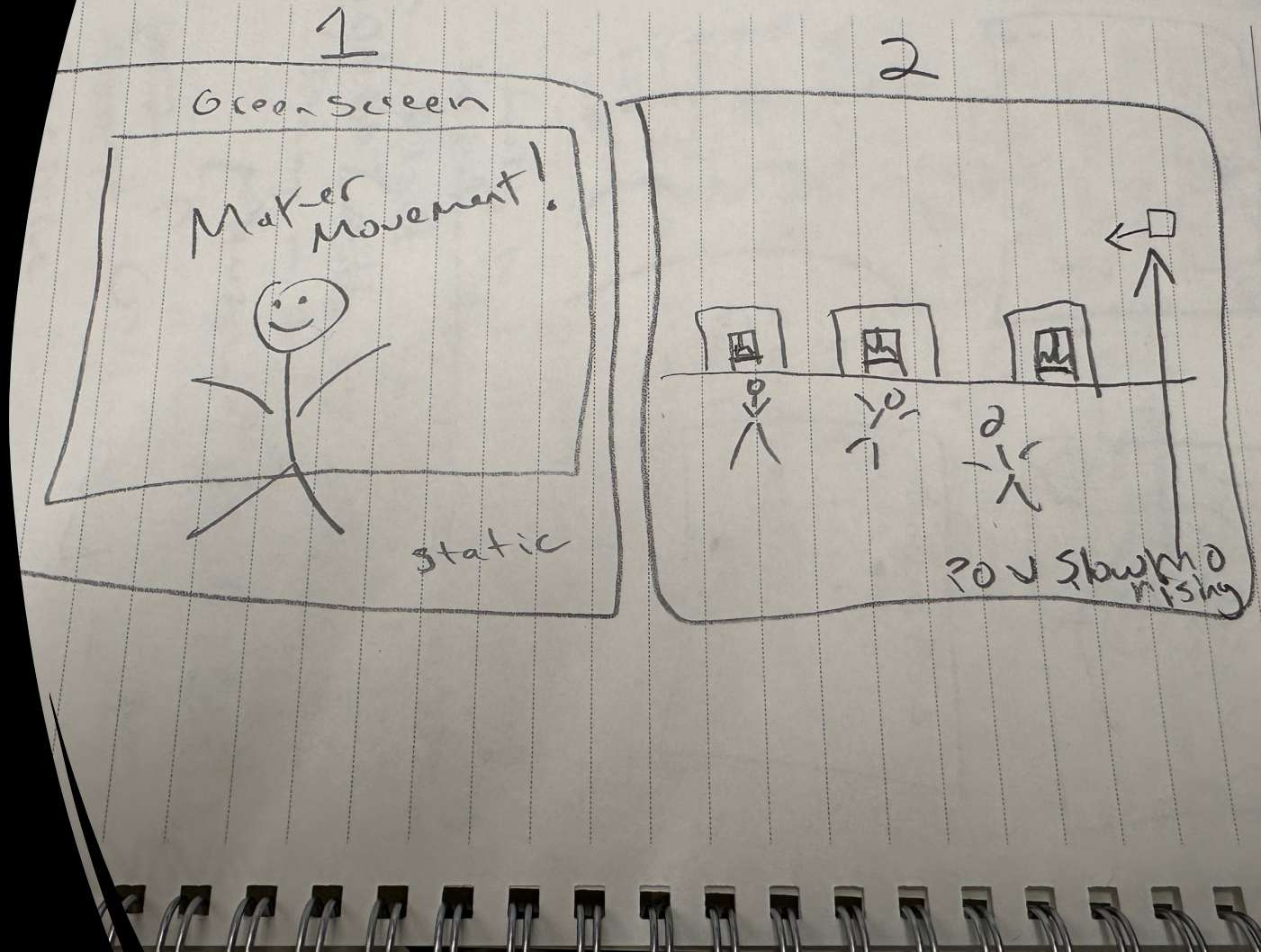
Movement	Effect
Dolly (vs Pan): Gimbal (Stabilized: following behind, in front, beside)	Expresses flow, propels action
Orbital / circling (vs static)	Explicit emphasis on a subject, stops time
Crane (vs tilt)	Establishes context (often with wide angle)
Handheld (with ninja walk)	Used to create a sense of immediacy, chaos, or realism.
High / low static (vs eye level)	Meet a subject on its own (vs. the viewer's) terms
Move in / Pull out	Focusing in and out of a subject or action
POV (Point of View) – the way we see everything	Subjectivity / eye of the beholder

B-roll footage
to fill out
narrative (and
sometimes
cover mistakes)



Shot list

- Sequence of video clips to be captured
- Details about composition, movement, perspective
- B-roll is included but some can be looser and spontaneous
- Most efficient order for shooting (vs. following the video's timeline)



Green Screen Tips

- Light both your subject and the green screen fully and separately
- Allow for at least 24" or 36" distance between the two
- Consider the compatibility of subject and eventual backdrop in terms of the temperature, colours, brightness, and position of each
 - In Canva, you can often adjust colours and temperature
- Don't wear green

Planning a video

- What stories would you like to tell (purpose) and what resources do you have (means)?
- How will you structure your story – what are the parts, and in what order will they appear?
Story board it ----->
- Will you use narration, subtitles, music?
- Which images will you use?
 - Still? Moving? Fictional representations? Documentary images?
 - Which words/sounds will fit with the images you choose?
- Who will assume which role(s)?

