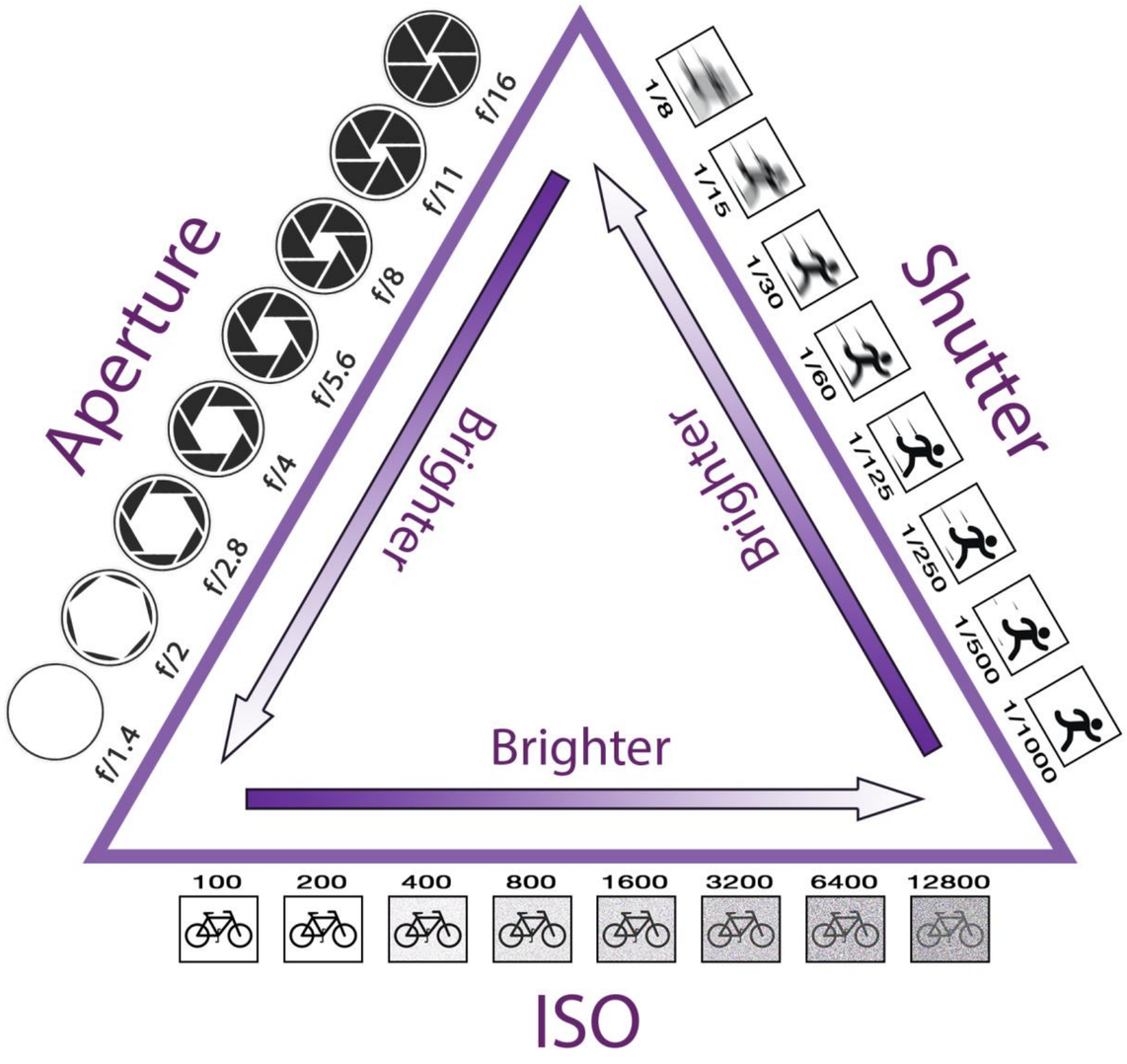
PHOTOGRAPHY BASICS

ELEMENTS OF EXPOSURE



APERTURE

CONTROLS AMOUNT OF LIGHT & DEPTH OF FIELD



f 2.8 f 4 f 5.6 f 8 f 11 f 16 f 22

Larger Aperture ⟷ **Smaller Aperture**

MORE LIGHT → **LESS LIGHT**

DEPTH OF FIELD

Depth of Field refers to how much will be rendered in focus in front and behind the subject or focus plane.



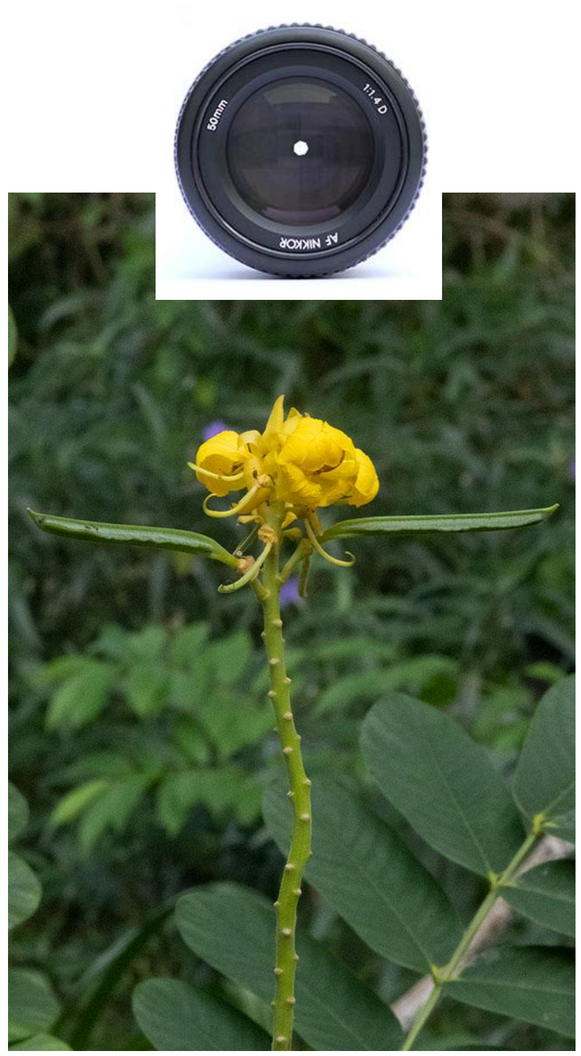
f 2.8 @ 1/60 ISO 400



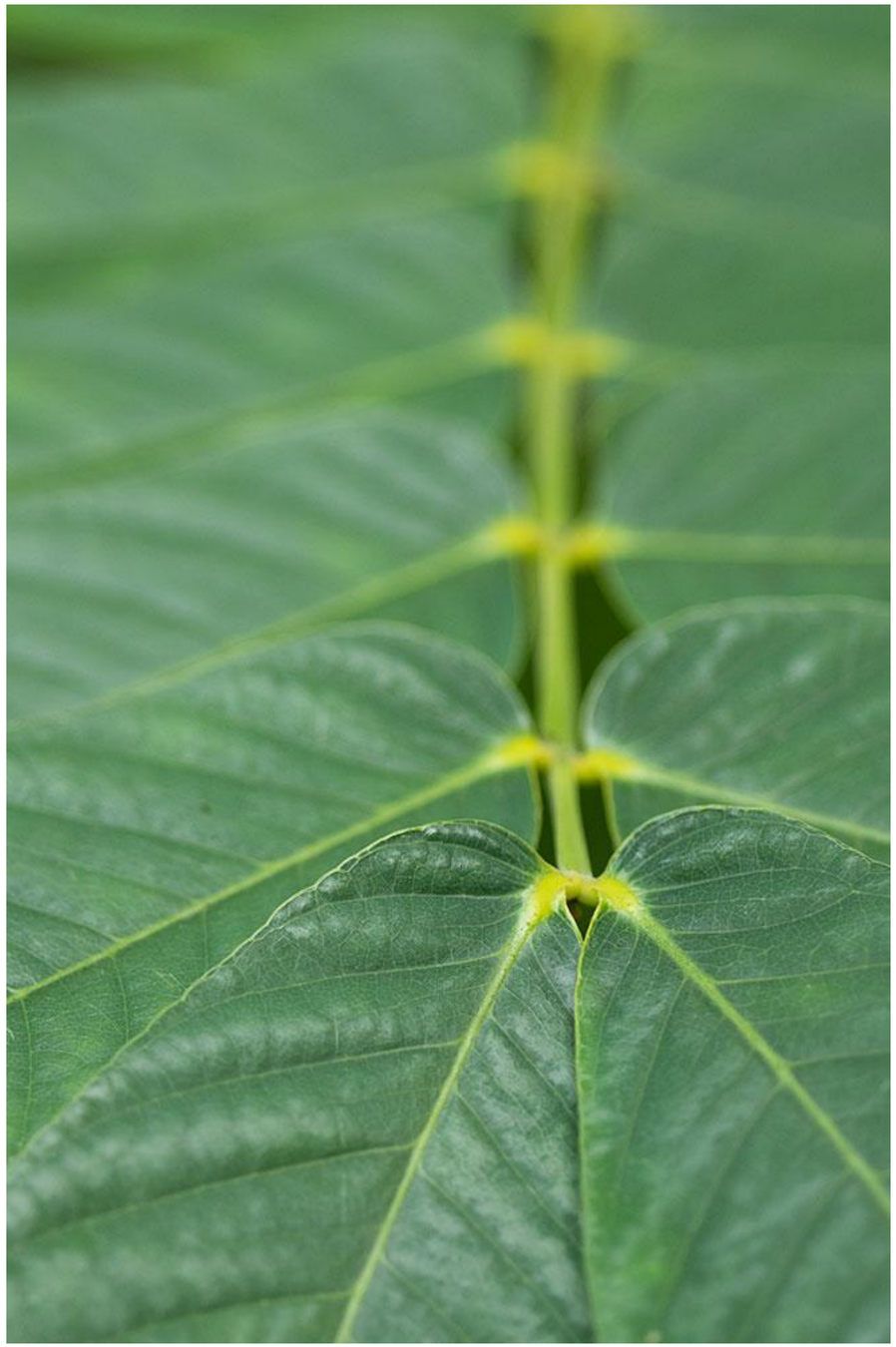
f 8 @ 1/60 ISO 800

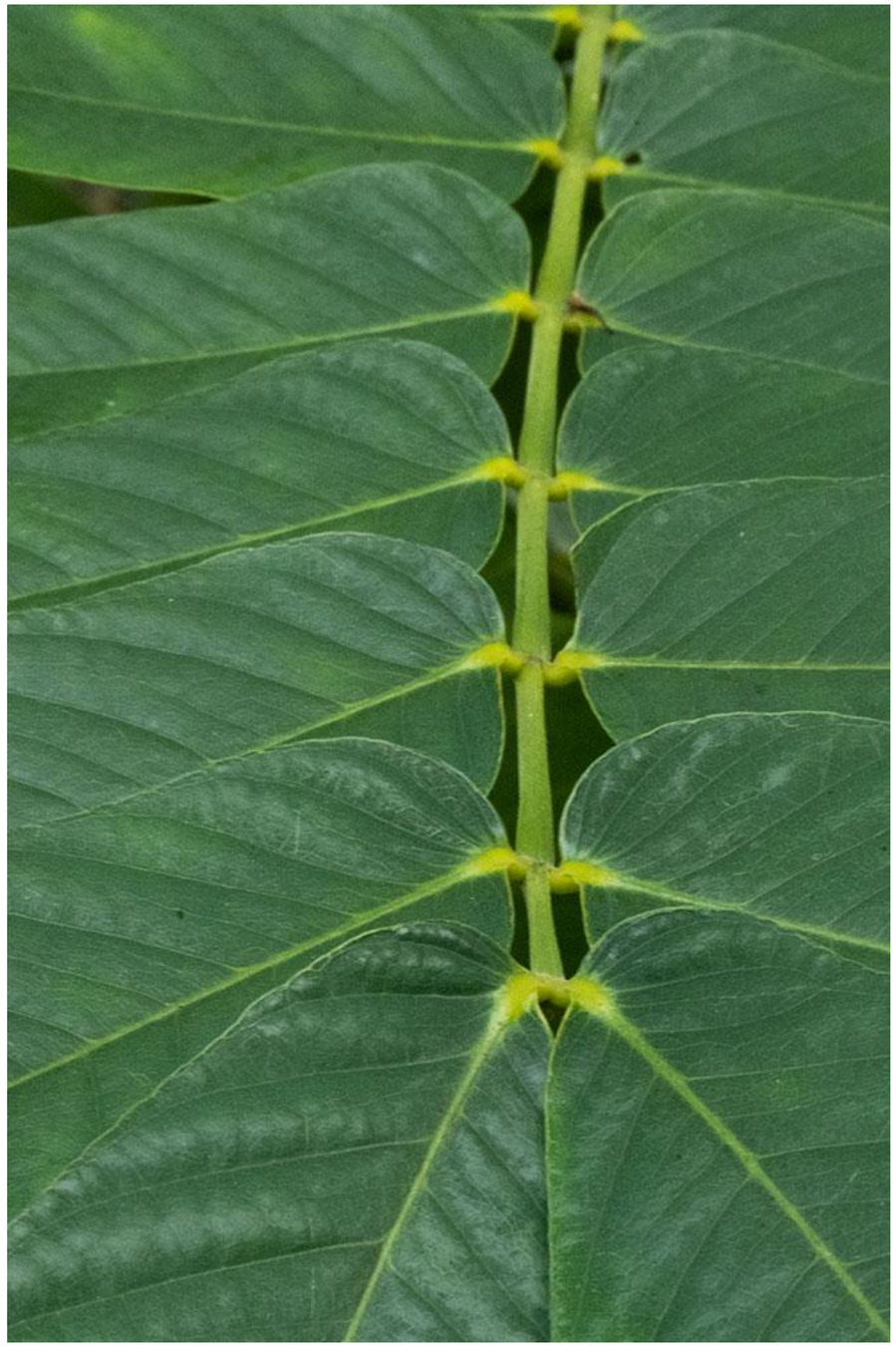


f 11 @ 1/60 ISO 1600



f 22 @ 1/60 ISO 3200





WHERE IS THE APERTURE?

Lens or Dial



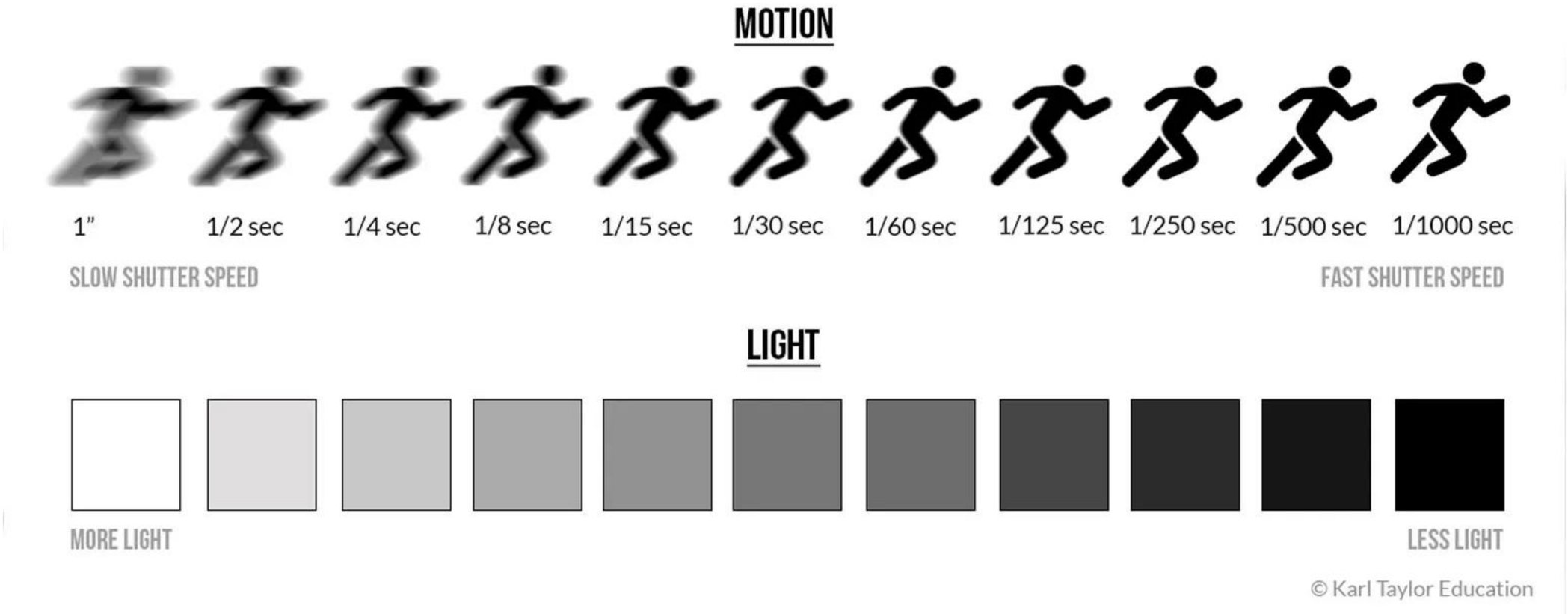




f 8.0 @ 1/1600 ISO 2500

SHUTTER SPEED

CONTROLS TIME AND MOTION



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1 sec @ *f*16 @ ISO 100

1/2000 @ *f*8 @ ISO 100

The shutterspped necessary to stop or blur an acition is relative to the speed of the action.

1/2000 @ *f8*@ ISO 800

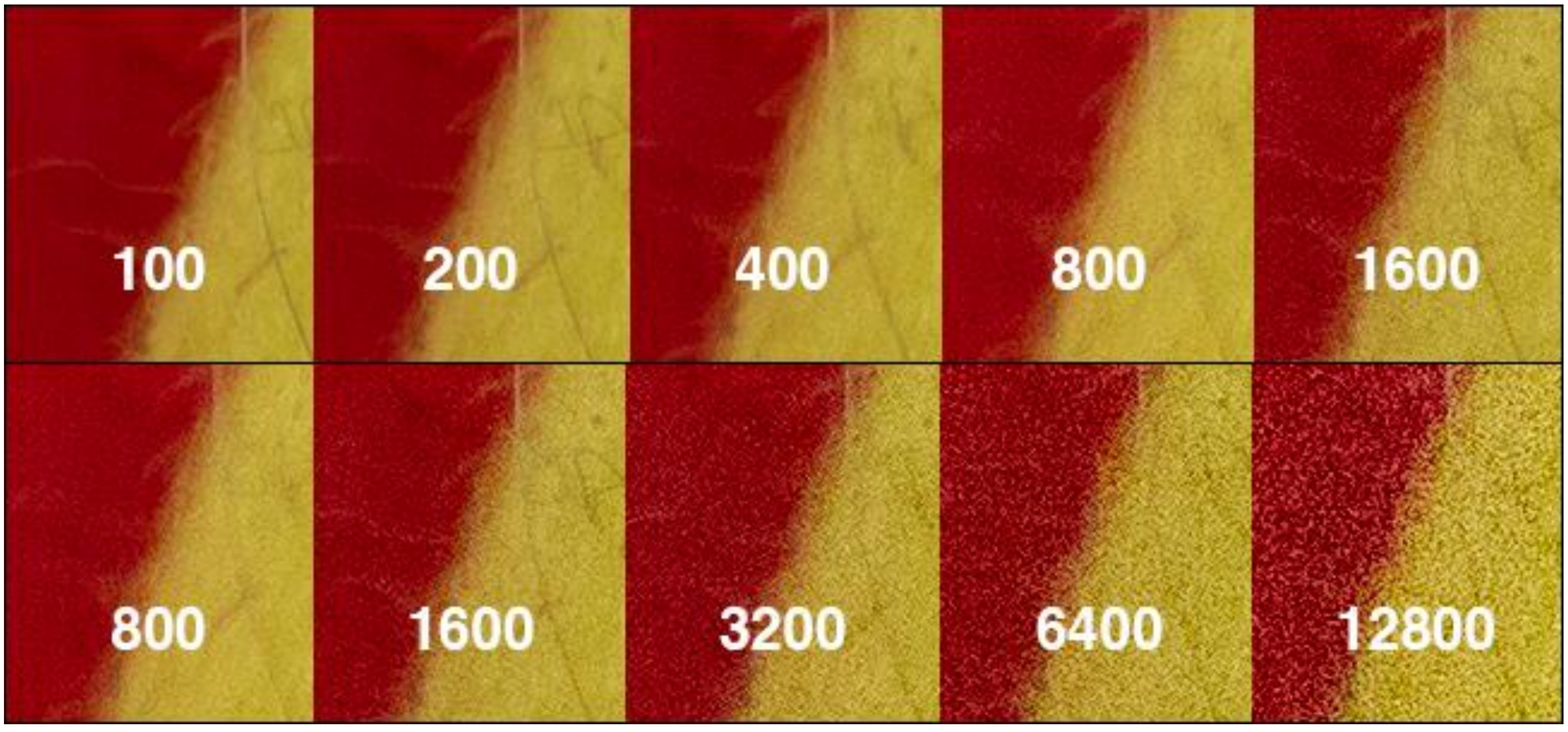
1/4000 @ *f8* @ ISO 4000

ISO

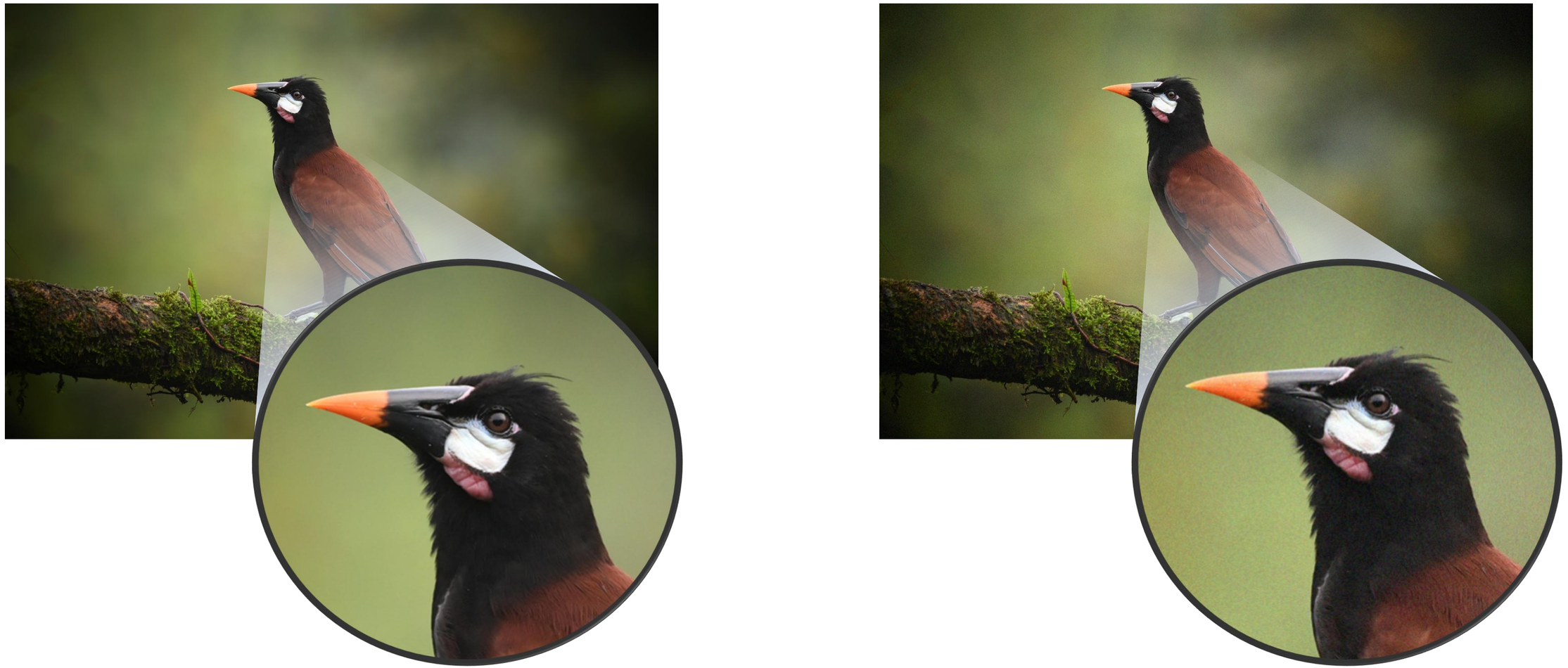
ISO in photography refers to how sensitive your camera's sensor is to light.

- The higher the iso the faster the shutter speed you an select. In general quality suffers when using high ISO's
- The lower the ISO the longer the shutterspeed.

ISO



ISO – SAMPLE



(higher ISO = brighter but more noise specially in the shadows)

METERING MODES

The purpose of metering modes in cameras is to help the camera measure light accurately and choose the best exposure settings for a scene.

More specifically, metering modes tell the camera:

- Which parts of the scene to prioritize when measuring brightness
- How to balance highlights, shadows, and midtones
- How to expose correctly in different lighting conditions

Evaluative / Matrix / Multi

- Measures light across the **entire frame**
- Uses algorithms (often with **AI + subject detection**) to prioritize faces or subjects

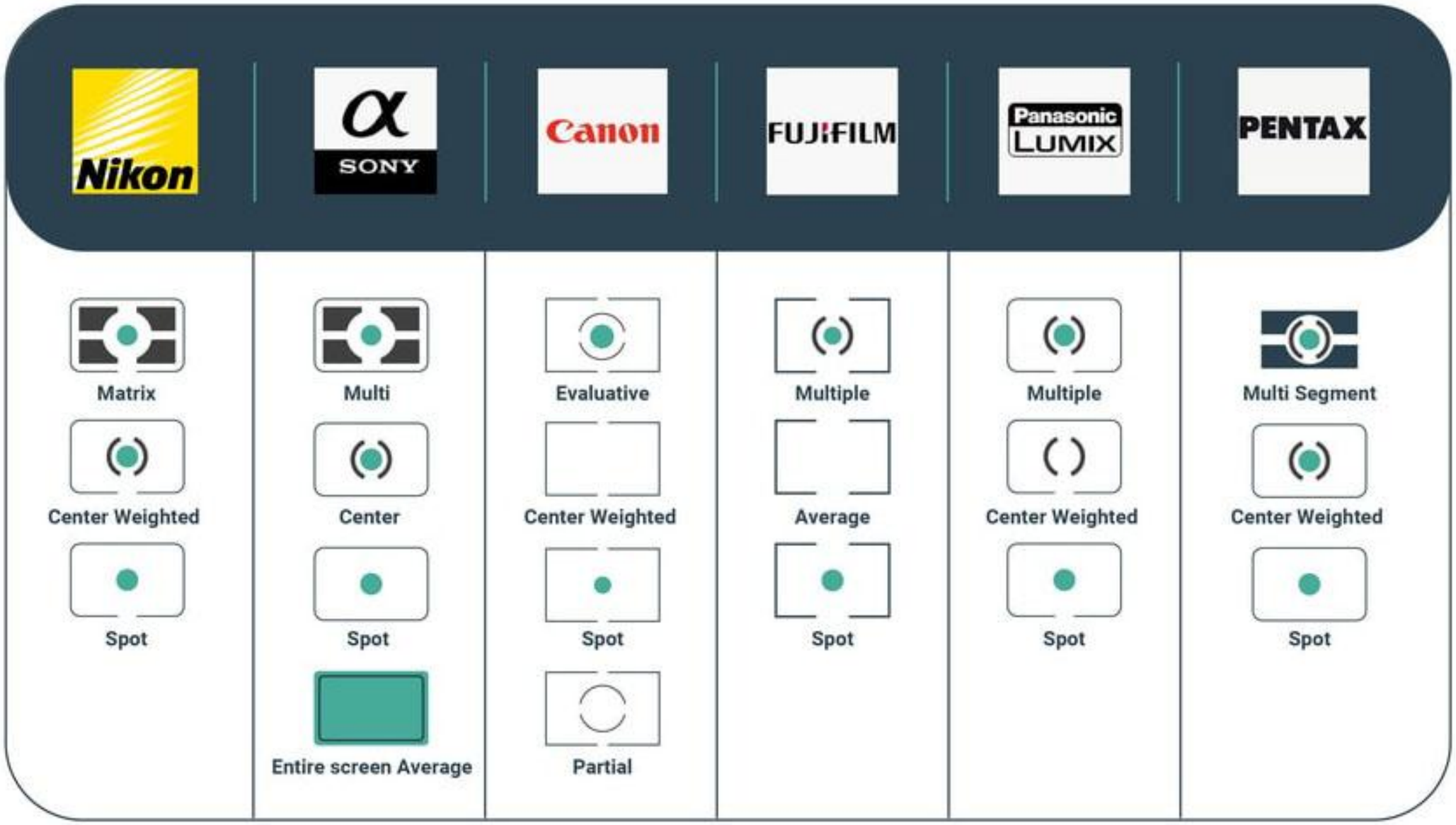
Center-Weighted

- Meters the whole frame but gives more importance to the center
- Good for portraits or subjects near the middle
- More predictable than Matrix in tricky lighting

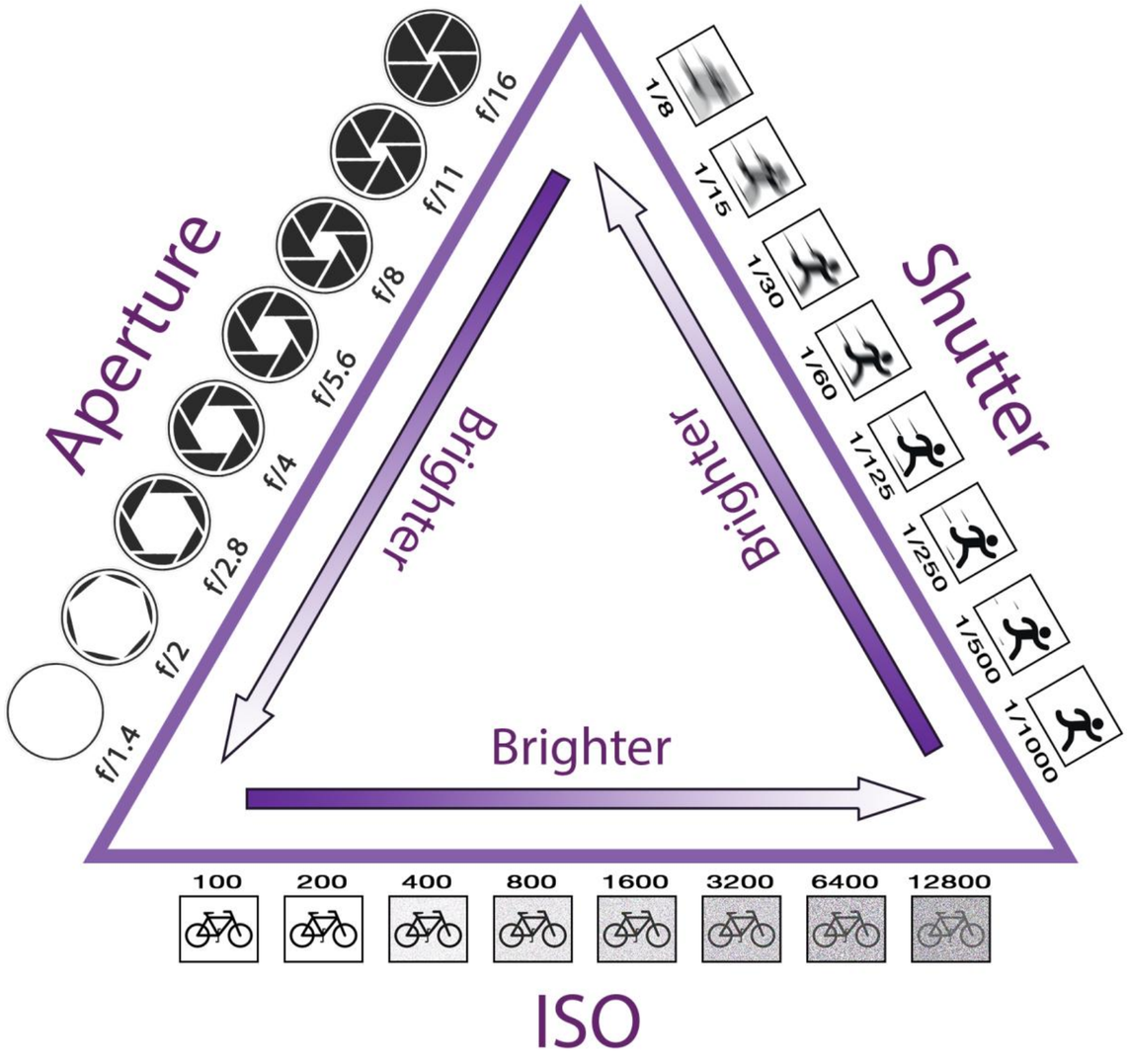
Spot

- Measures light from a **very small area** (1–5% of the frame)
- Ideal for **high-contrast scenes** (backlit subjects, stage lighting)
- Lets you expose precisely for a face or key subject

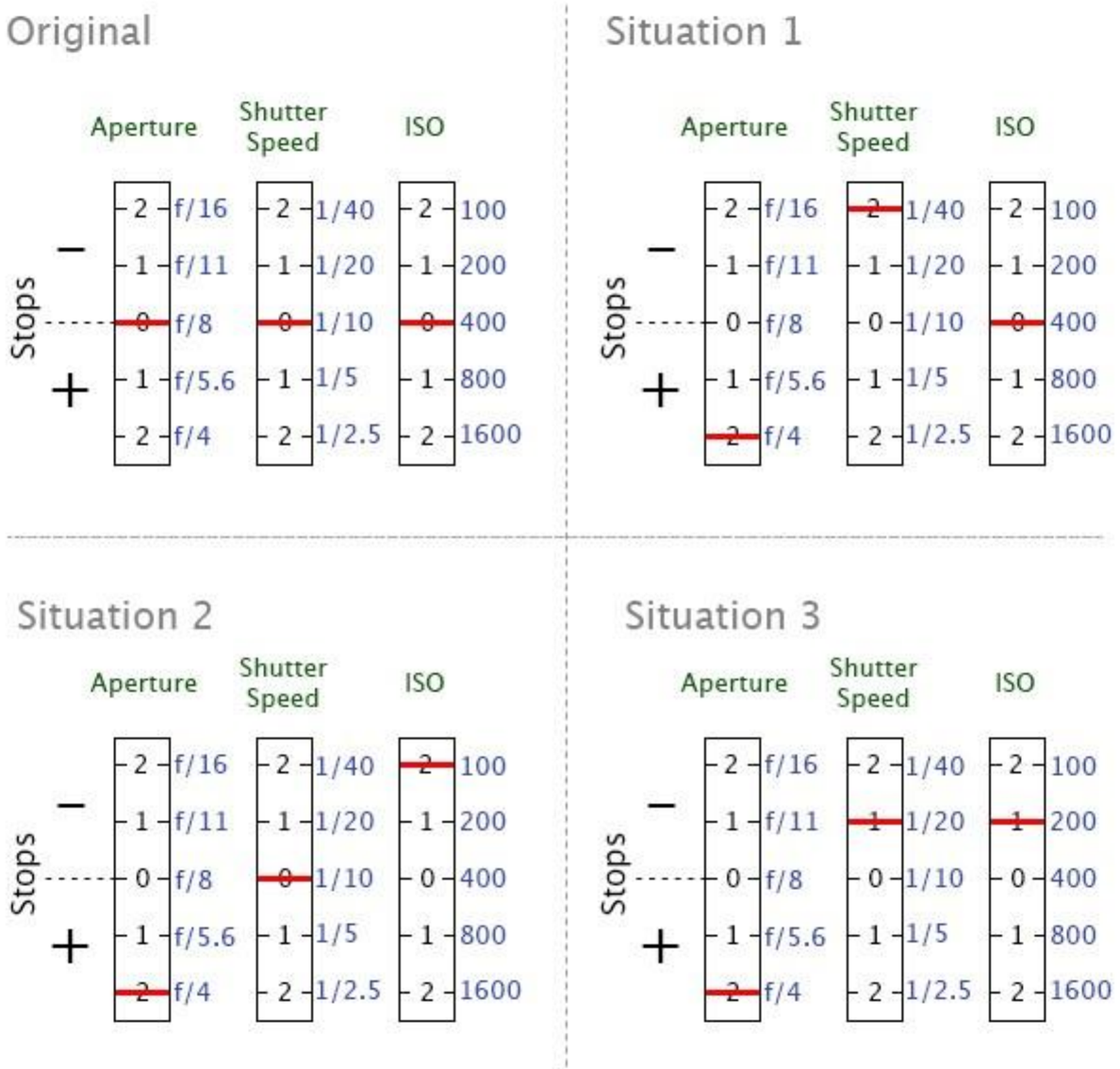
METERING MODES



ELEMENTS OF EXPOSURE



BALANCING THE EXPOSURE



(everything related, change aperture effects to shutter speed and the brightness of an image)

AUTO FOCUS MODES

Different AF options for every subject matter

- **<u>Single-Shot AF</u> (AF-S, One-Shot, S-AF):** Locks focus once when the shutter button is pressed halfway. Best for still subjects like landscapes or portraits.
- **<u>Continuous AF</u> (AF-C, AI Servo, C-AF):** Continuously adjusts focus as long as the shutter button is held down. Ideal for moving subjects like sports or wildlife.
- **<u>Hybrid/Automatic AF</u> (AF-A, AI Focus, Auto-Servo):** Evaluates the scene and automatically switches between Single and Continuous modes.
- **<u>Full-time AF</u> (AF-F, AFF):** Continuously focuses, often used for video to keep subjects sharp during recording.

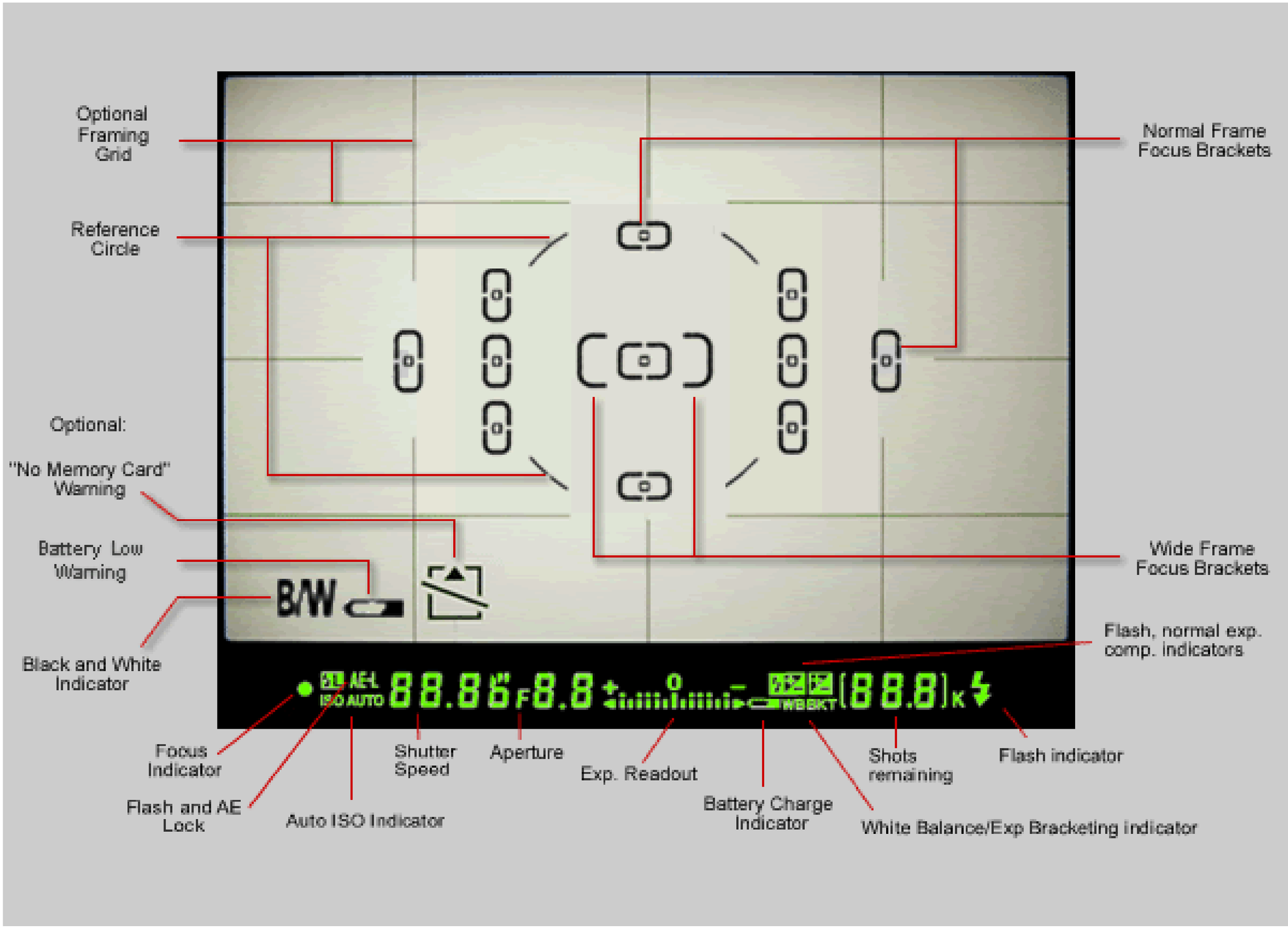
AUTO AREA MODES

Different AF options for every subject matter

- **[S] Single-point AF:** A small, single square in the center. Ideal for precise focus on a static subject.
- **[D-25/72/153] Dynamic-area AF:** A square surrounded by smaller dots. Used for subjects that move, allowing the camera to use surrounding points if the subject leaves the main point.
- **[3D] 3D-tracking:** A square icon that indicates the camera will track the subject as it moves across the frame.
- **[Grp] Group-area AF:** A cross-shaped arrangement of four or five small squares. Good for erratic subjects.
- **[Auto] Auto-area AF:** An empty, larger box representing the whole frame. The camera automatically selects the subject.



DSLR VIEWFINDER



INFORMATION OVERLOAD?

