

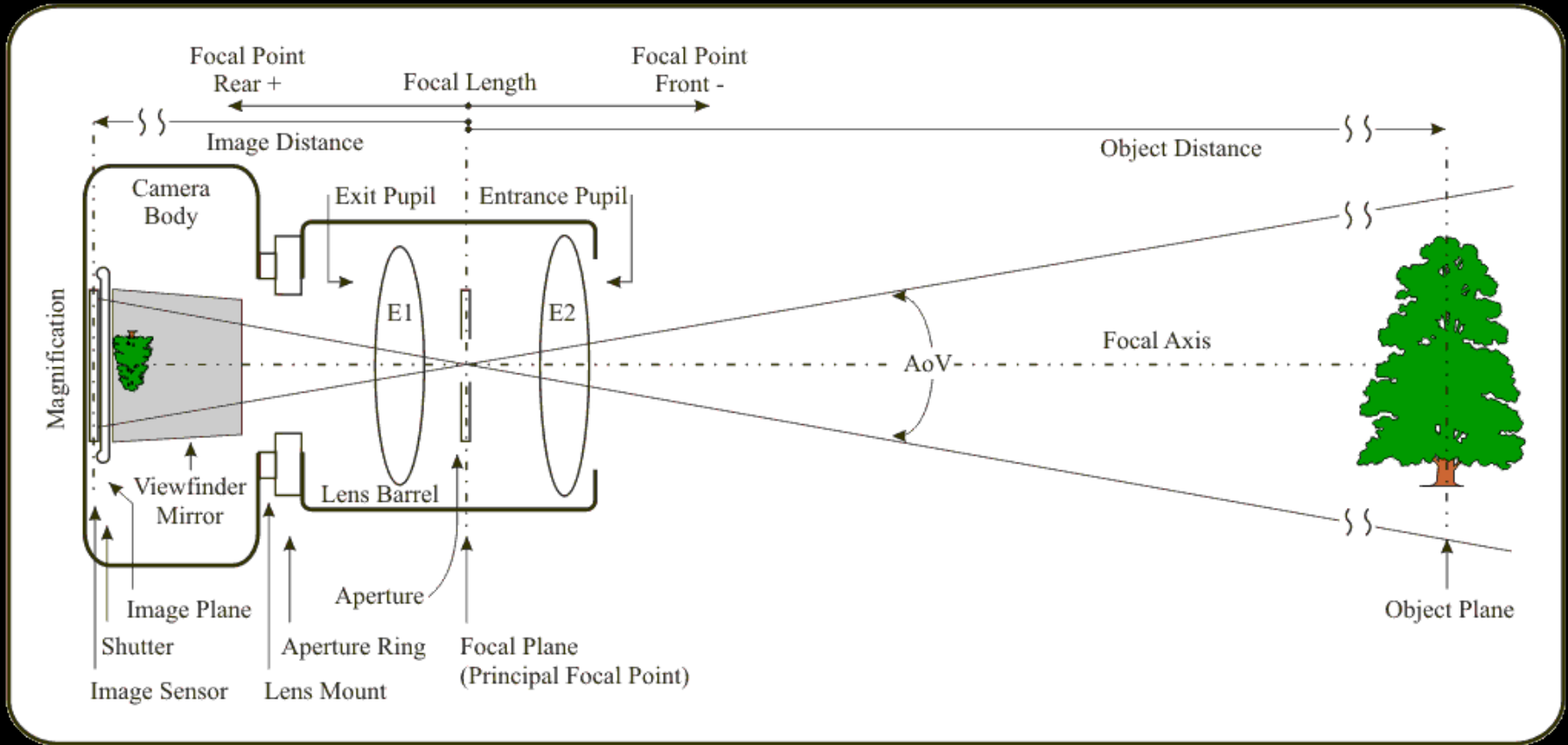
PHOTOGRAPHY

module 2.0

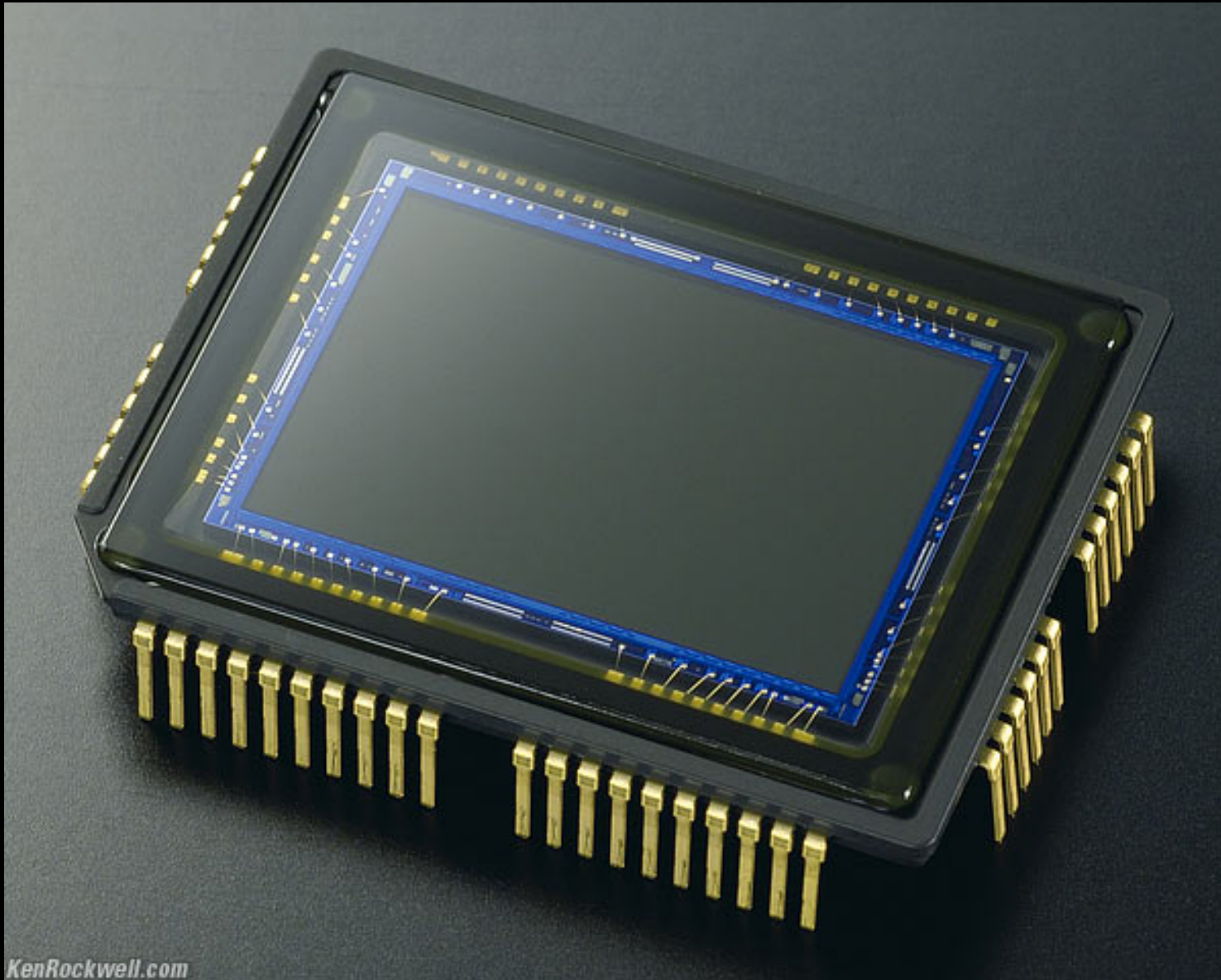


Handwritten signature

THE CAMERA { HOW IT WORKS }



THE DIGITAL SENSOR



CAMERA SETTINGS

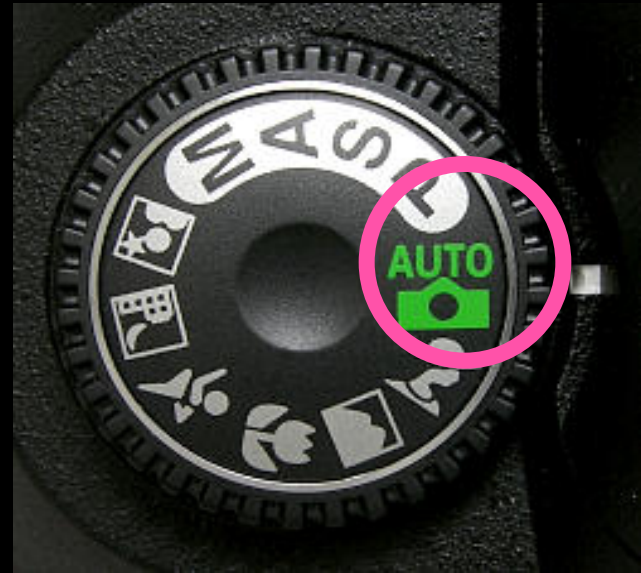
- The idea of giving a "**correct**" exposure to a photograph means letting the image formed by the camera lens act sufficiently on your digital sensor to give a good quality picture. The fact is there is *no magical correct setting* to find the balance of neither too much nor too little light falling onto the digital sensor.
- The light entering the camera and therefore the degree of exposure the film or digital sensor receives is controlled by the **aperture, shutter speed, and iso** settings you have chosen.



CAMERA SETTINGS

• Auto Mode

- Found on all cameras
- Used by beginners
- If you want to take a quick shot without worry about settings
- In automatic mode you can not make changes to the settings
- For suckas and fools



CAMERA SETTINGS

- Landscape

- the Landscape mode allows you to shoot pictures of landscapes like mountains
- maximizes depth of field in the image so that everything in the picture frame is clear
- delivers sharpness from the foreground to the background
- Usually a tripod is needed because the shutter speed is longer.





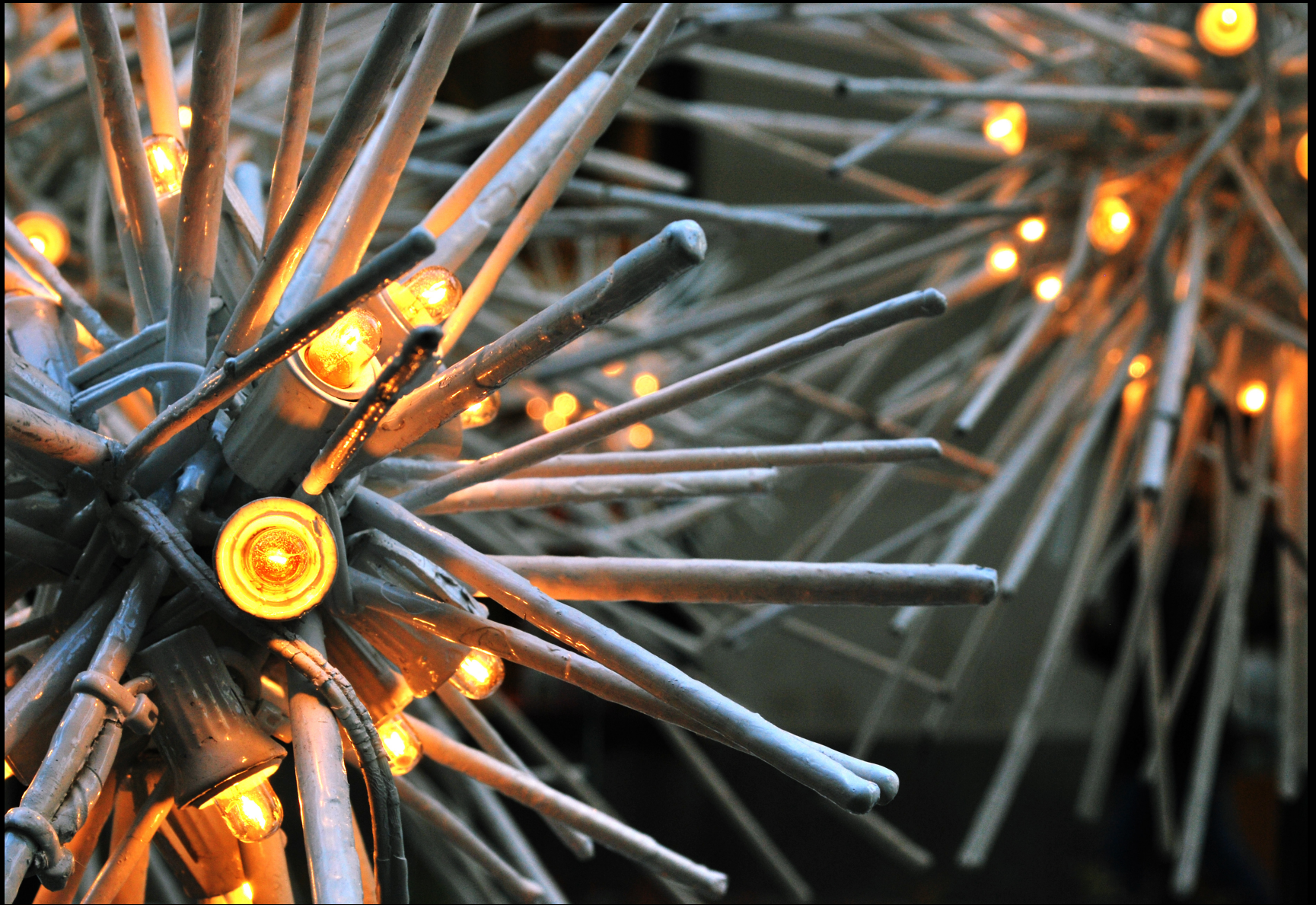


CAMERA SETTINGS

• Macro Mode

- The Macro Mode allows you to focus on objects at amazingly small distances - *sometimes just centimetres from the lens.*
- Use the Macro mode when you need to capture the smallest little details on your subject.
- Area of focus is sharp, background is blurry.
- Helps create a contrast between subject and background.







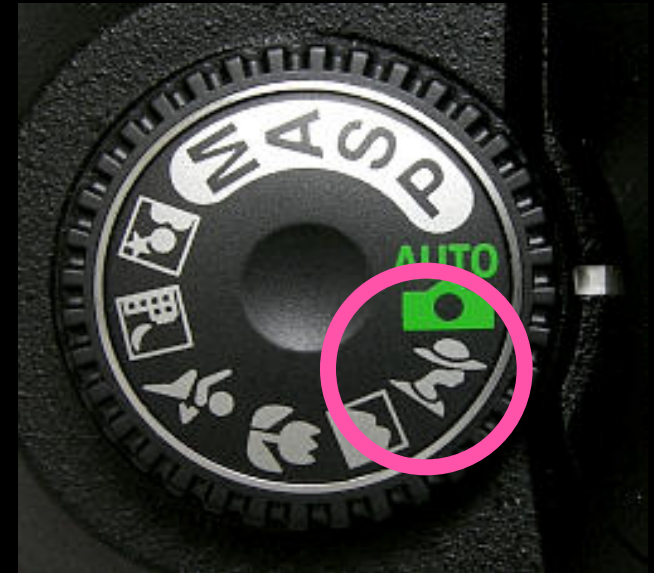


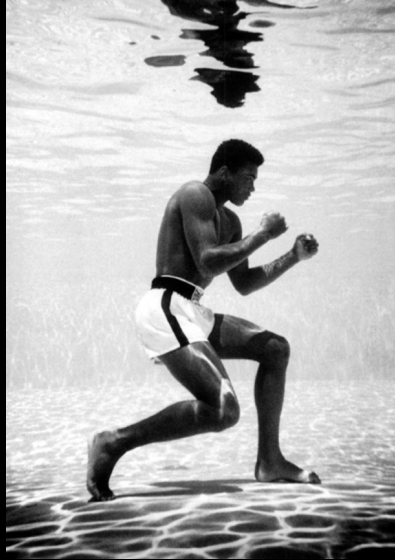


CAMERA SETTINGS

• Portrait Mode

- If you want to shoot close-ups of people or faces, the Portrait Mode is the mode to choose.
- Clear image in the front and soft blurry background
- Similar to Macro Mode.







Cut your Job
and get a hair
HIPPIY!





GIRLFRIEND

WONT

GIVE ME NO SEX
NEED MONEY FOR

2 HOOKERS

PLEASE HELP
ME CATCH A
STD







CAMERA SETTINGS

• Sports Mode

- If you want to capture fast action, then you'll need the fast shutter speed setting
- When you switch to this mode, your camera will automatically choose the fastest shutter speed possible given the situation
- Eliminates the blur that occurs when trying to capture movement







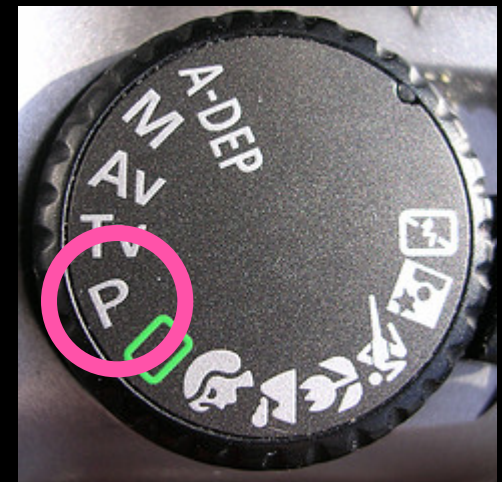




CAMERA SETTINGS

• Program Mode

- Program mode (semi-auto/manual)
- The camera will automatically choose the right settings for you (shutter, aperture, iso, focus modes), but you can make limited changes to these settings
- A large degree of control over settings, but the camera will automatically prevent you from using settings that result in over – or underexposure



CAMERA SETTINGS

• Shutter Priority Mode

- Allows you to adjust the shutter speed, camera will decide on the other key factor: the correct aperture to get a good exposure
- Mode is favoured by photographers who want to capture action (faster shutter speed) and blurred movement (slower shutter speed)
- Settings are represented by fractions of a second (i.e.- 1/30, 1/60, 1/125, 1/500, 1/80000).













@MichaelLangford



As an example, both images above are correctly exposed but at the same time differ greatly. The image on the left has very little depth of field but frozen hand movement achieved with shutter speed set at **1/30 second** and aperture setting at **f2.8**. The image on the right had **1 second at f16** and shows nearly all keys in focus but the moving hands appear blurred due to the slower exposure.

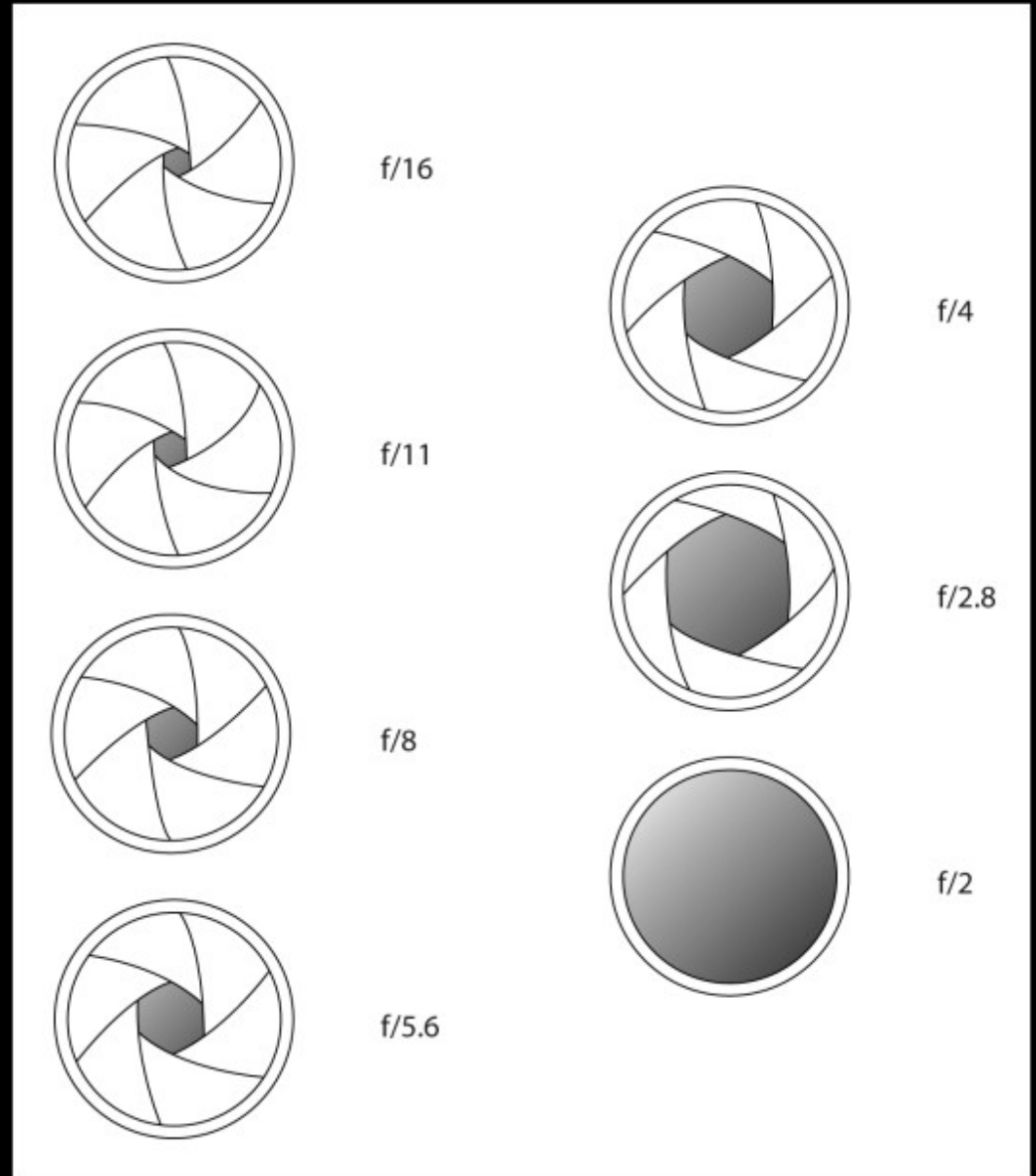
CAMERA SETTINGS

• Aperture Priority Mode

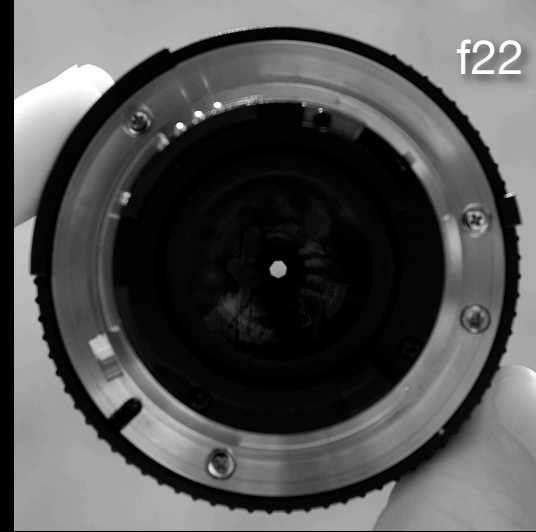
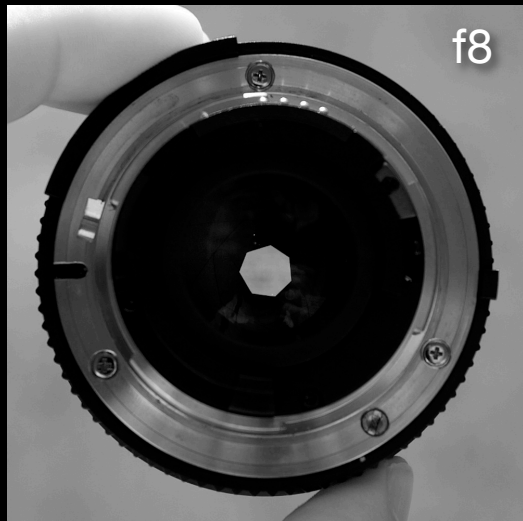
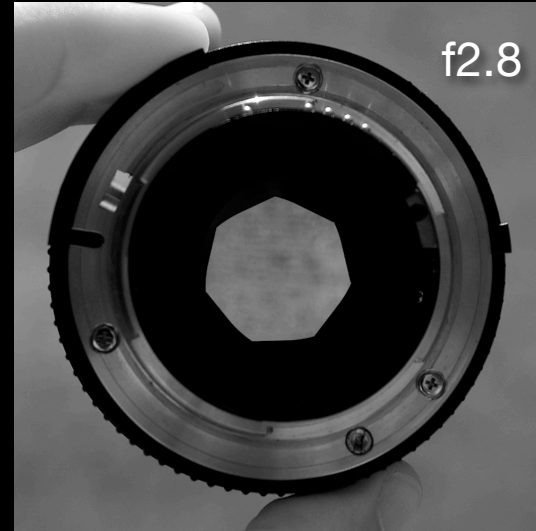
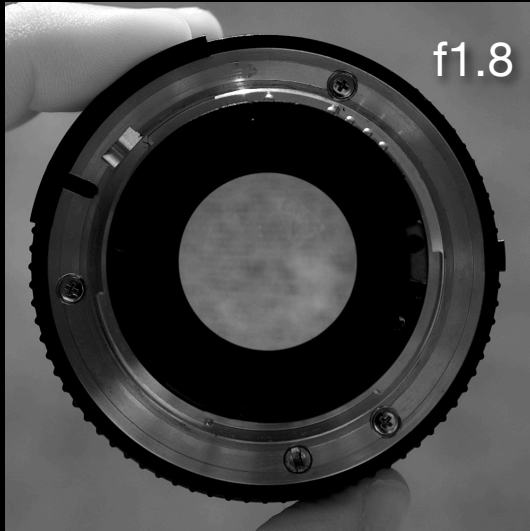
- The opposite of shutter priority, mode used by portrait, candid, and landscape photographers
- Set the aperture you need, camera will decide on the shutter speed
- Used when depth of field is an important aspect of your photograph
- High Av setting will capture a scene with large depth of field, low Av setting will capture a narrow depth of field
- Small number= large opening
- Large number= small opening



The larger the APERTURE (size of the lens opening), the smaller the number.



APERTURE







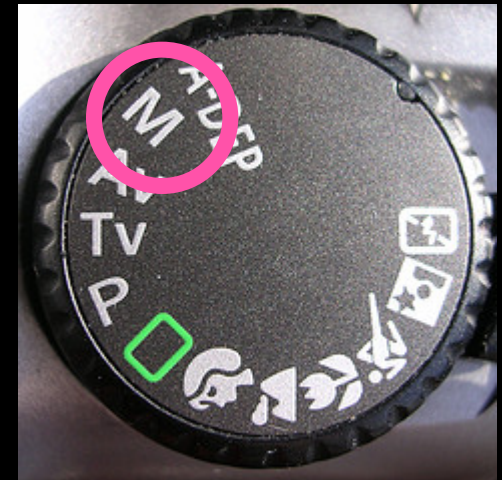
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FINE ART PHOTOGRAPHY

CAMERA SETTINGS

• Manual Mode

- You'll set all the camera's menu functions, and your aperture setting and shutter setting are set independently
- Is tricky and requires lots of practice
- The camera will not make any adjustments for your mistakes like all the other modes
- Most rewarding one you get the hang of it
- Use the light meter to help you obtain the correct exposure



Aperture Priority

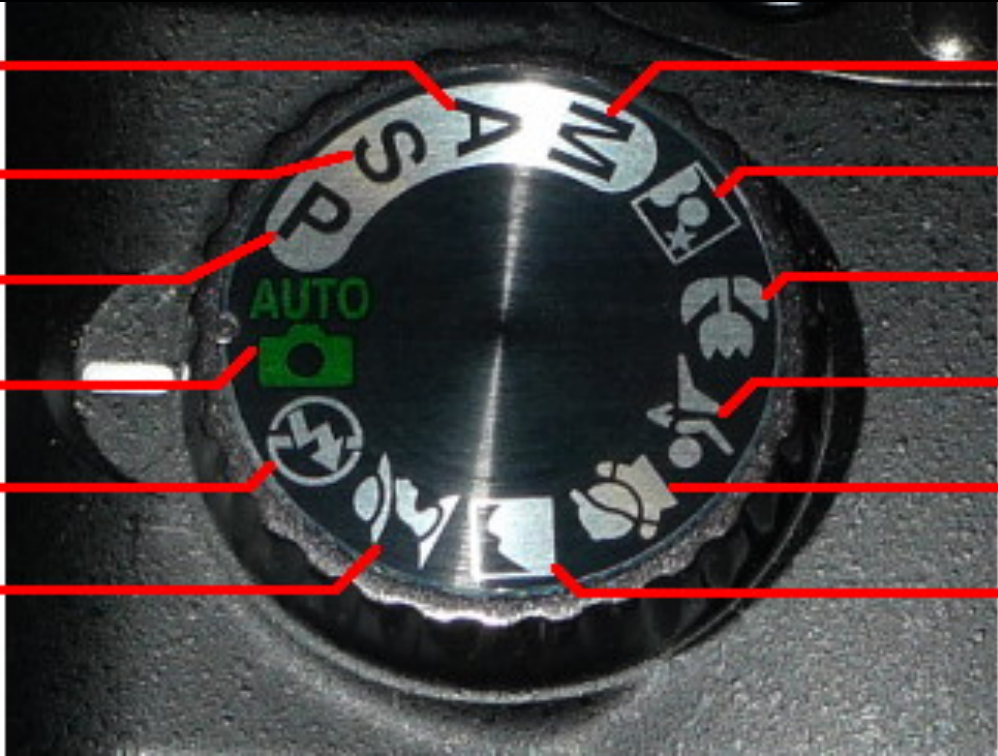
Shutter Priority

Programme

Auto

No Flash

Portrait



Manual

Nighttime

Macro

Sport

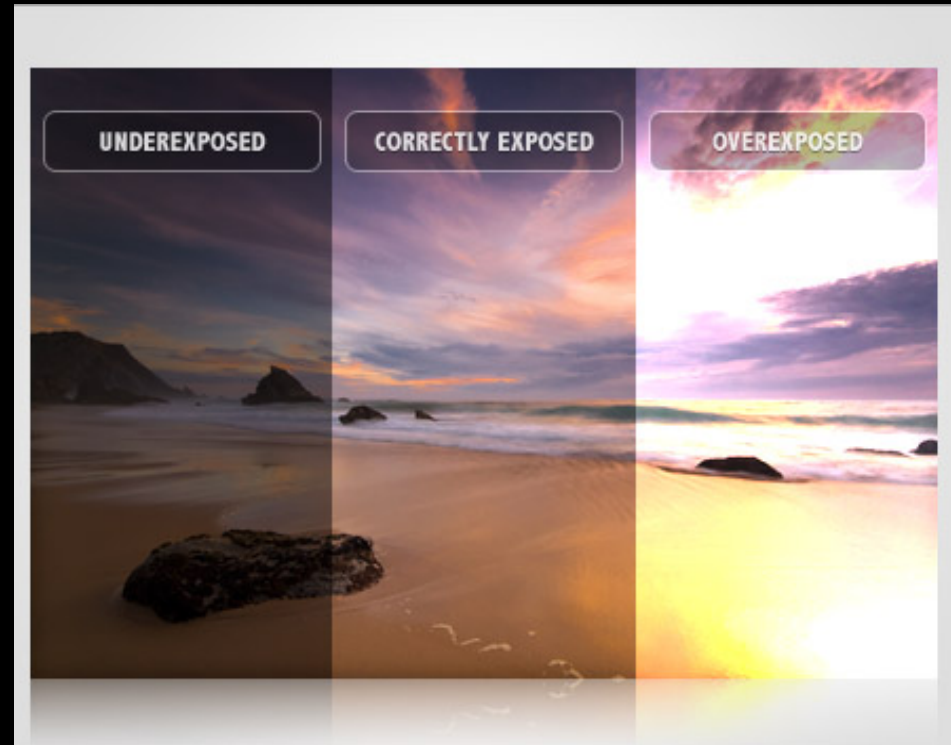
Kids

Landscape

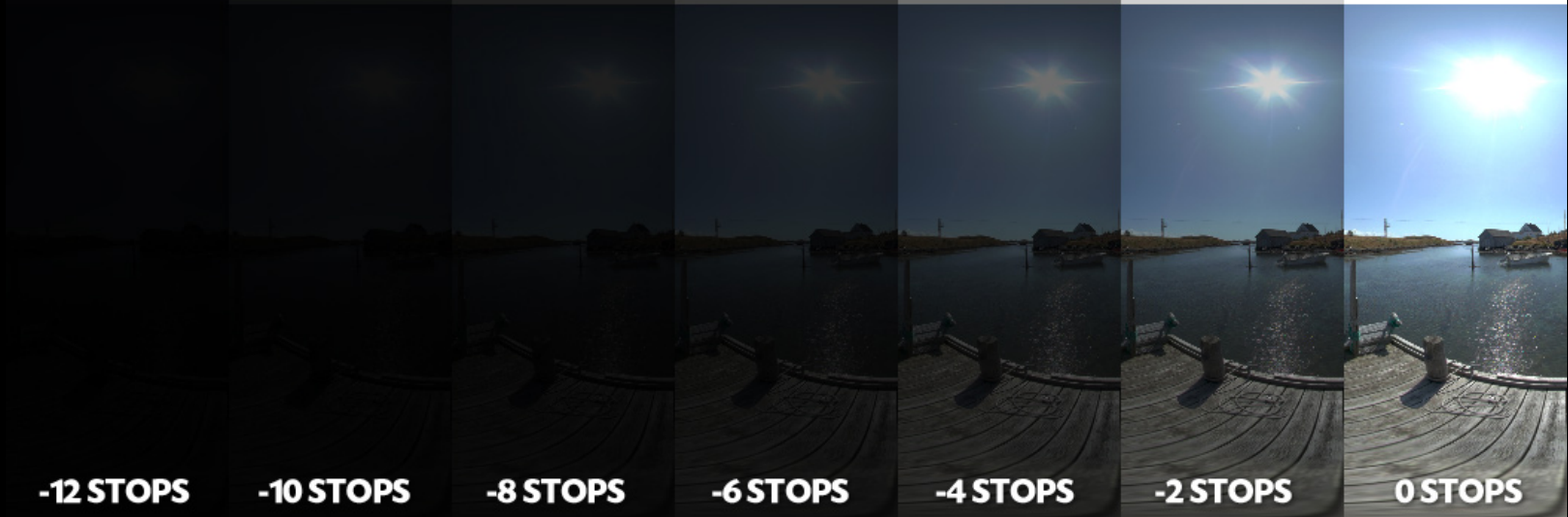
Camera Settings Overview

EXPOSURE

- When a photograph is **correctly exposed**, it has *plenty of detail recorded in both the darkest shadows and the brightest parts (highlights)* of the picture and therefore produces a good print.
- An image that is **overexposed** has received *too much light in the lightest parts* of the image also called *highlights* and they appear white and lost on print resulting in poorer image quality.
- In contrast, an image is **underexposed** when it has received *too little light*. The dark parts of the image are thus converted to pure black, losing detail in the shadow areas. This leads the image to appear heavy and featureless when printed.



EXPOSURE



EXPOSURE



UNDER EXPOSURE



OVER EXPOSURE



CORRECT EXPOSURE

DEPTH OF FIELD

The Difference between Depths of Field



Narrow depth of field



Large depth of field

ISO

The speed of your FILM

What ISO denotes is how sensitive the image sensor is to the amount of light present. The higher the ISO, the more sensitive the image sensor and therefore the possibility to take pictures in low-light situations.

ISO Speed & Exposure

ISO speed affects the shutter speed / aperture combinations you can use to obtain correct exposure.

Suppose your digital camera's light meter warns you there is not enough light to correctly expose a scene. You could use the on-board flash, but let's suppose again it's not allowed (like in a concert or indoors recital).

You would then need to use a higher ISO. Set on "ISO Auto" mode, your digital camera will automatically select a higher ISO. Otherwise, you can manually select the next higher ISO and see if the increased sensitivity allows you to obtain a correctly exposed picture. If it does, you can now take a correctly exposed picture.

ISO

The speed of your FILM

If you find the camera is using a shutter speed that is too slow (1/60 sec. and slower) to handhold the camera steady and shake-free (thus resulting in blurred pictures), and you cannot open up the aperture anymore, and you do not have a tripod or other means to hold the camera steady, and you want to capture the action, etc. etc. -- then you might select the next higher ISO which will then allow you to select a faster shutter speed.

ISO Speed & Noise

However, all this increase in sensitivity does not come free. There is a price to pay with your image appearing more noisy.

An image sensor will exhibit "noise" (comparable to "graininess" in film) at the higher ISO speeds. Unlike film, where graininess can sometimes contribute to the mood of the image, noise produced by an image sensor is undesirable and appears as a motley of distracting colored dots on your image.

ISO DIFFERENCES

ISO 100 (less or no grain)

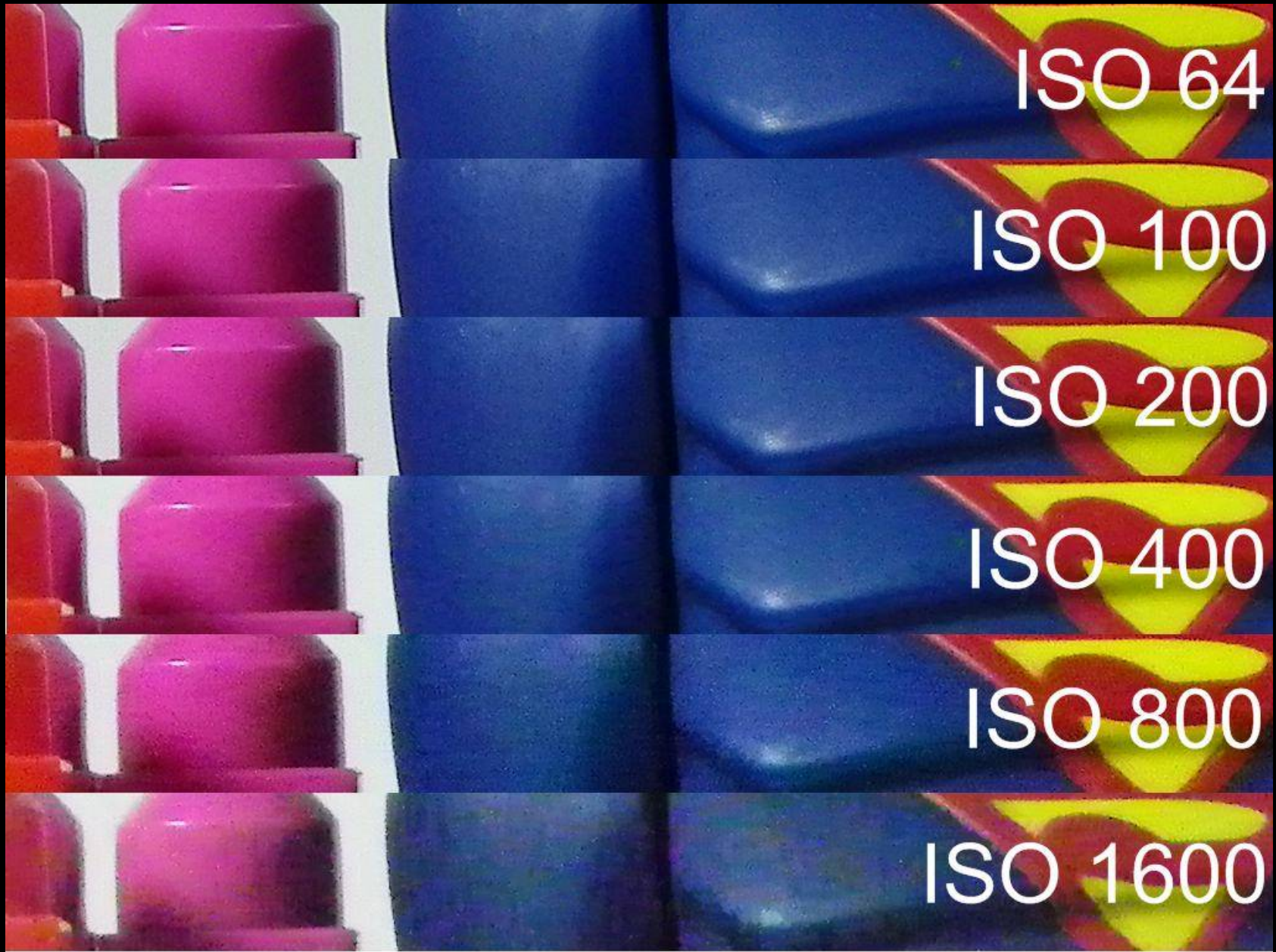
- A slower speed of film, but has better quality imaging because there is no graininess



ISO 1600 (lots of grain)

- A faster speed of film which results in better lighting and exposure. But you get lots of graininess





ISO 64

ISO 100

ISO 200

ISO 400

ISO 800

ISO 1600



HOW TO HOLD A CAMERA

by sweet khaki shorts guy



Your elbows should lock into your body so that you have stability. Also use walls, or objects around to help steady the camera. This will reduce the number of blurry photos. **ALWAYS USE BOTH HANDS!!!**

CORRECT!



www.dkphotographs.wordpress.com

WRONG WRONG WRONG



THE LCD SCREEN



SHUTTER SPEED

- How fast your shutter is.

LIGHT METER

- Indicates whether you need more (+) light or less (-) light.
- Helps you get the correct exposure for your shot

CAMERA MODE

- Auto, landscape, macro, shutter, aperture, program, etc...

BATTERY LIFE

IMAGE QUALITY

IMAGE SIZE

PHOTO COUNT

- How many photos you have left

APERTURE

- The size of the lens opening
- Measured in F-stops

ISO

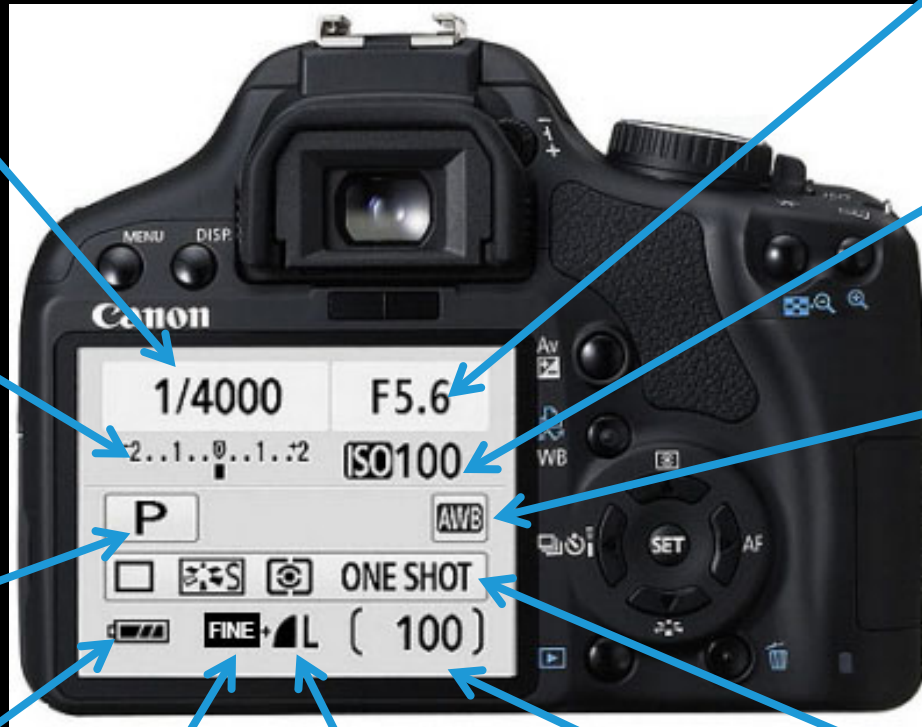
- The speed of your film. Higher number equals grainier photo

WHITE BALANCE

- Adjust to the type of light you have in your environment
- le- sunny, cloudy, warm lights, cool lights, night time, etc...

RELEASE MODE

- Rapid fire
- Single shot
- Remote
- Timer





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STEPS TO TAKING A PHOTO...

1. Recognize a picture taking opportunity (Pre-visualize)

- Do you have an interesting subject?

2. Access Lighting Situation

- Are you in a dark or bright setting?
- Is it sunny, dim, cloudy, warm or cool light?

3. Decide on camera settings

- Choose a setting that works with the lighting situation, moving or still subject/background, or depth of field (narrow or large).

4. Set camera

5. Compose picture

- Are you using the Rule of Thirds?
- What orientation are you choosing? Landscape or Portrait?

6. Take the photograph (lather, rinse, + repeat)



SIMPLIFIED

Ideally, steps 2 to 5 should be 2nd nature to the photographer and really the only steps of photography should include:

- **Recognize a picture taking opportunity (Pre-visualize)**
- **Compose picture {Rule of Thirds}**
- **Take Picture**

Steps 2 to 5 is a problem solving process of deciding how to set one's camera based on any given light situation so that a picture is exposed as visualized. The art of photography comes into play by customizing these settings to create different effects. There are many effects that can be achieved through customization of camera settings for example blurring background and stopping movement.

Familiarizing yourself with your equipment is the process of starting with understanding what is involved with a technically sound picture.