PHOTO 1 QUIZ REVIEW

What is this?
shutter speed dial

What does it do?
controls how long the shutter is open - in fractions of a second

What does shutter speed TECHNICALLY control in your photograph?
how long the shutter is open - how much LIGHT gets in

What does shutter speed CREATIVELY control in your photograph?
a sense of MOVEMENT or MOTION

What is this?
a tripod

When do you use this?
at shutter speeds of 1/60 or below

What happens if you don't?
it will be blurry and you will be disappointed. I promise.

If you wanted to take a picture of a running man so that the action would be "frozen" - what shutter speed might you try? *1/1000*

What if you wanted to "show movement" - how would you do that? *1/30 (blur)*
1/30 & panning (sharper subject, blurred background)

What is this?
aperture ring

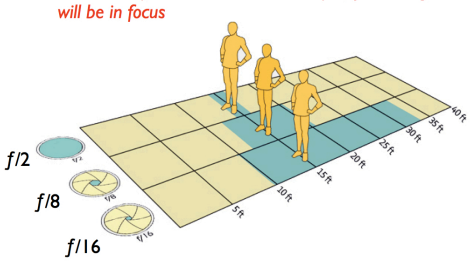
What does it do?
controls the size of the aperture, measured in f-stops

A low *f*-stop number = a ___LARGE___ aperture.

What does aperture size TECHNICALLY control in your photograph?
how large an aperture - how much LIGHT gets in

What does aperture size CREATIVELY control in your photograph?
DEPTH OF FIELD

Depth of Field
- *the "wall of focus"*
- *how much (forwards and backwards) of your image will be in focus*



What are the settings for our "point of departure"?

f/8 *125*

How do we use point of departure?
as a STARTING POINT for light metering

Why are those settings our point of departure?
they give you a lot of room to make changes in your aperture and/or shutter speed, in either direction

What is bracketing?
taking the same photograph at different exposures

Why would you do this?
to make sure you get a good exposure - especially in situations that are challenging to meter, or for photographs that are really important to you

How do you bracket?
1. *light meter*
2. *choose which setting you want to "keep" (aperture or shutter speed)*
3. *identify the 3 settings you will use when bracketing (the one directly across from the "keep," and also "one up" and "one down".)*
4. *take the three photographs*

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500	250	125
	f/8	

4. *take the three photographs*

f/8 at 1/500 *f*/8 at 250 *f*/8 at 125

Equivalent Exposures

What are "equivalent exposures"?
different combinations of aperture/shutter speed settings that give you the same exposure (range of light/dark values)

Why do they matter?
- *to help you make use of your CREATIVE controls (depth of field and the sense of movement) while still getting a properly exposed image*
- *to help you NOT use a tripod but still get a clear and properly exposed image*

USING Equivalent Exposures

Let's say you are asked to shoot a photograph of a pinwheel in motion, for the "OMG it's SPRING!!!" issue of a local magazine.

You find a pinwheel that is moving, and your camera's light meter tells you that you should use 1/500 and *f*/2. This is the picture you get:

f/2 and 1/500 sec

You're really happy with the exposure (the range of light and dark values) but it totally doesn't show motion. Like at all.

What should you do?

USING Equivalent Exposures

What setting was responsible for "freezing" the motion of the moving pinwheel? *shutter speed*

What could you do to create the sense of motion in your photograph? *lower the shutter speed*

f/2 and 1/500 sec

Since you got the EXPOSURE right, that means you're happy with the relationship between your settings, you just need to use a lower shutter speed such as perhaps 1/30 sec.

Use an Equivalent Exposure chart to figure out what aperture to use with 1/30 sec so that you have the same EXPOSURE that you had with 1/500 sec.

USING Equivalent Exposures

Use an Equivalent Exposure chart to figure out what aperture to use with 1/30 sec so that you have the same **exposure** as with 1/500 sec.

1000	500	250	125	60	30	15	8
f/1.4	*f*/2	*f*/4	*f*/5.6	*f*/8	*f*/11	*f*/16	*f*/22

these images are equivalent exposures

f/2 500

USE A TRIPOD ← *f*/11 30

Film Speed
how sensitive the film is to light

What changes?
the size of the silver particles

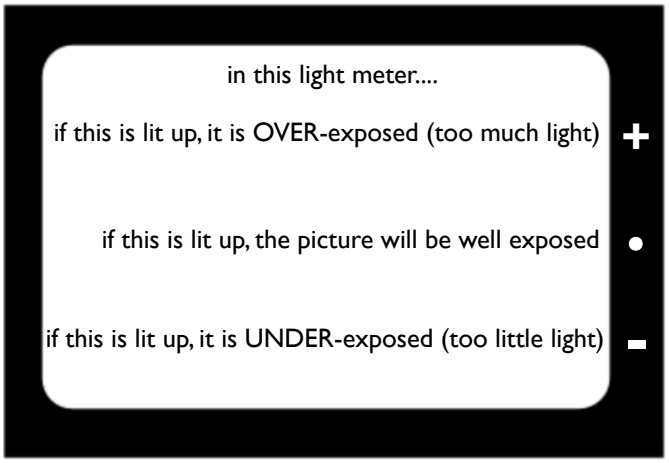
What is ASA/ISO?
scales we use to measure film speed

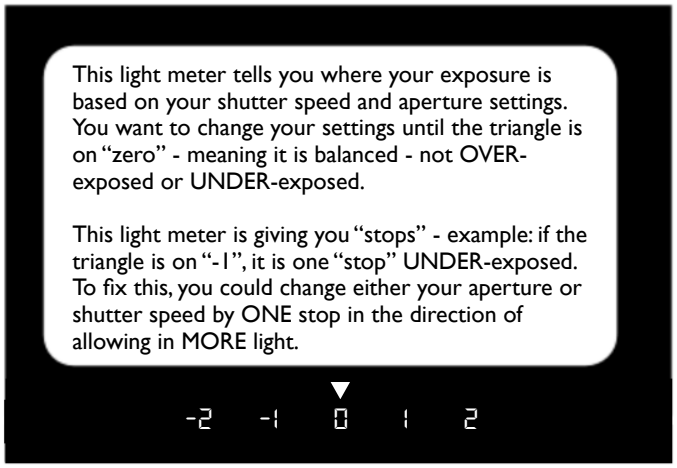
LOW speed film has ___SMALL___ silver particles.
it can be only used in situations that have HIGH levels of light

HIGH speed film has ___BIG___ silver particles.
it can be used in situations that have LOWER levels of light

REVIEW THE STEPS FOR PROCESSING 35mm FILM

1. WATER RINSE	Fill & Dump	Cold Water – Rinses off dust	10oz.
2. DEVELOPER	See Chart	Agitate for 1st minute, then 10 seconds every minute – Dump down the drain	10oz
3. STOP BATH	30 Seconds	Agitate constantly Return to container	10oz.
4. FIXER (check with Hypo-Chek)	10 Minutes (5 min. if not Arista)	Agitate for 1st minute, then 10 seconds every minute – Return to container	10oz.
5. WATER RINSE	1 Minute	Cold Water – Agitate constantly Change once halfway	10oz.
6. PERMA WASH	2 Minutes	Agitate Constantly Return to container	10oz.
7. WATER RINSE	5 Minutes	Cold Water – Agitate constantly Change twice at 1½ minute intervals	10oz.
8. PHOTO FLO	30 Seconds	Swirl, Return to container	10oz.





This light meter is a *APERTURE* Priority light meter.

You choose the *APERTURE* and then the camera recommends (by lighting up inside the viewfinder)...

...the *SHUTTER SPEED* to set your camera to.

If it is BLINKING on the top or bottom number, it means the camera can't find a shutter speed that works with your aperture in the current conditions. In this case, change your aperture.

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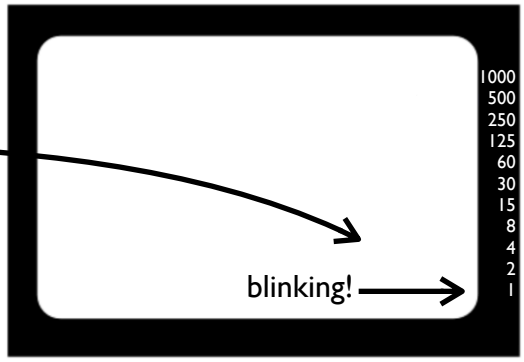
On the quiz, you will be given several examples (one each of the types shown above) of light meters.

For each example, you will be told what settings you (as the photographer) have chosen.

You will be shown what the camera is telling you.

Then you will be asked what you should change in order to get a properly exposed photograph.

In this example, the camera is telling you that for *f*22, which you have chosen, even at 1 second you can't get enough light. You would need to open your aperture to let in more light (a smaller number, such as *f*5.6) and check again to see what shutter speed the camera now recommends.



*f*22