

# Shutter Speed For Phone Cameras



You will be amazed at what your cell phone can do!

# Let's Get Started With a Video



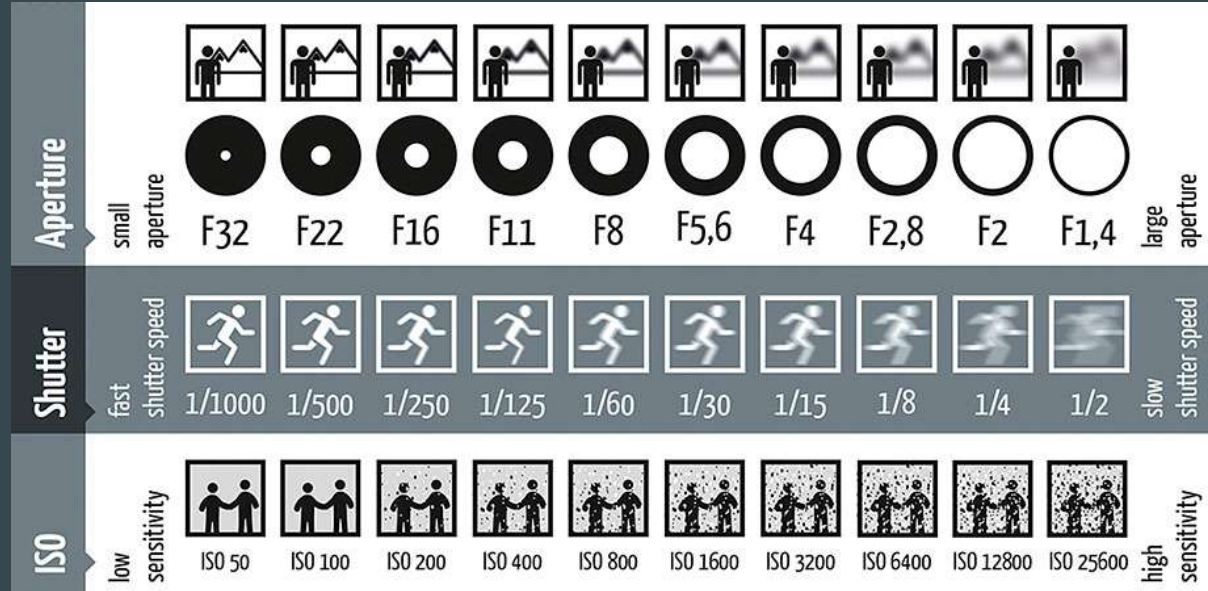
# Shutter Speed Works With Aperture and ISO = Exposure

Check out this handy diagram to better understand how aperture, shutter speed and ISO all work TOGETHER to get a photo.

Aperture: Controls how much light enters the lens, and controls the depth of field of your image.

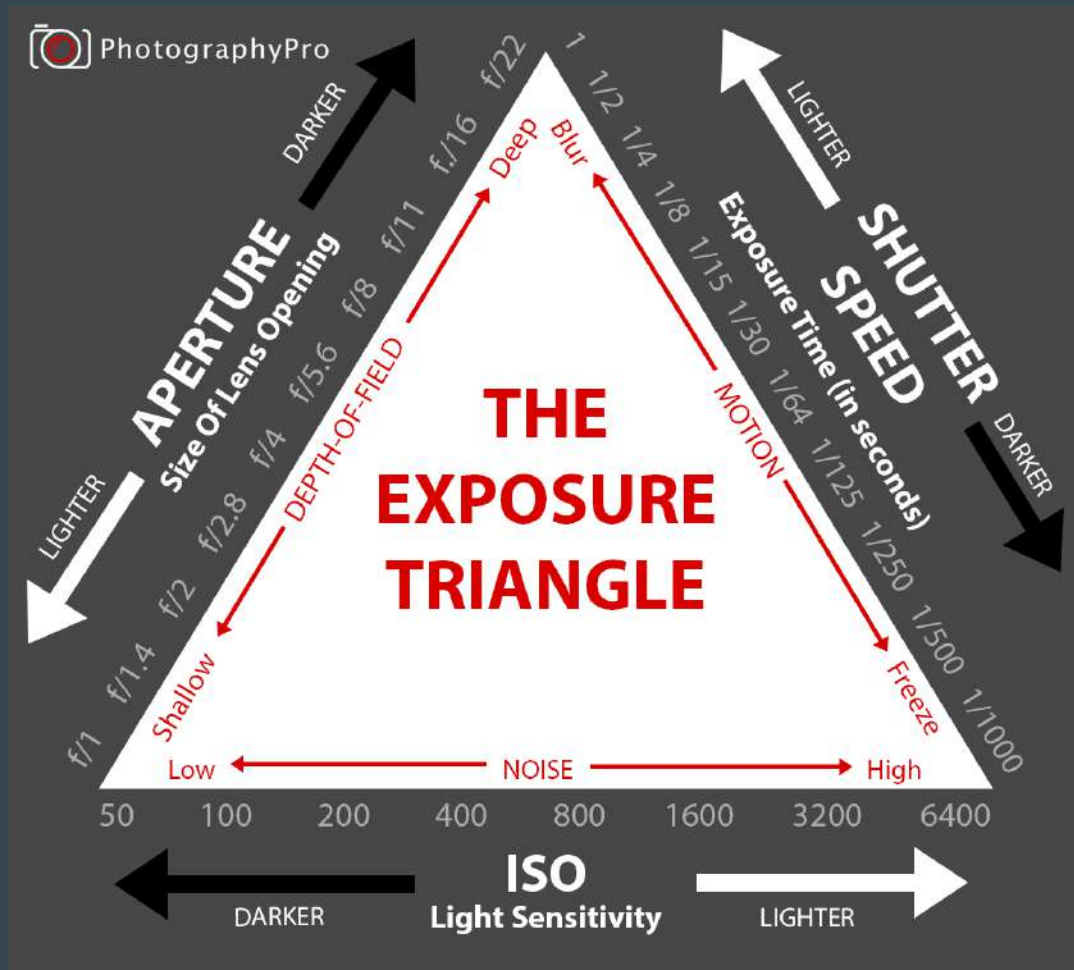
Shutter: Length of time the shutter opens and closes, and controls how motion is captured in an image can be.

ISO: is how sensitive your digital image sensor is to light.



# The Exposure Triangle

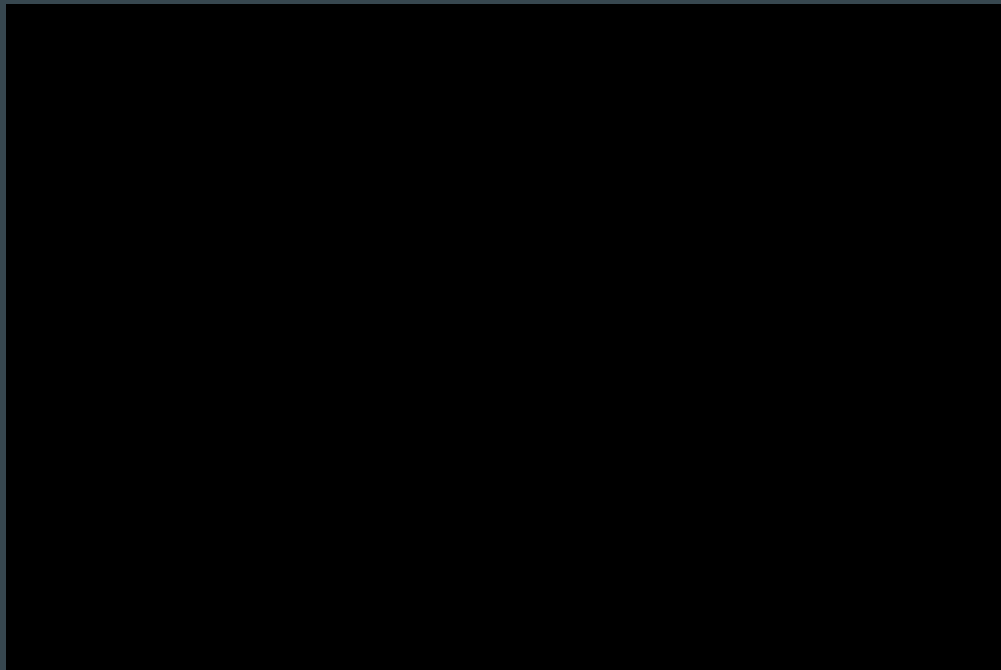
They all work TOGETHER to get a perfectly exposed shot. Your cell phone camera does an excellent job balancing all three parts of the exposure triangle. But there are plenty of apps that can allow you more manual control.



# You Can Freeze Motion or Show Motion



Our cameras can do super long exposures or capture incredibly fast ones...both things our eyes and brain can't even process.



## Moving subjects

Shutter speed choice becomes more important when you photograph moving objects. The quicker the subject is moving, the faster the shutter speed you need to freeze the subject. Go for a slower speed and the moving elements will appear blurred – but get the right degree of blur and your shot can look great.



When you choose a shutter speed that is fast it will **FREEZE** the subject.

When you choose a shutter speed that is slow, it will **SHOW** the motion.





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YOUR PHOTOGRAPHY MENTOR

# MINIMUM SHUTTER SPEEDS

For Maximum Sharpness

When handholding the camera, don't use a shutter speed slower than the focal length of your lens. However, you may use a shutter speed that's faster than the focal length.

LENS SIZE	MINIMUM SHUTTER SPEED					
50mm	1/50	1/70	1/100	1/200	1/400	1/600
24-70mm	1/50	1/70	1/100	1/200	1/400	1/600
100mm	1/50	1/70	1/100	1/200	1/400	1/600
70-200mm	1/50	1/70	1/100	1/200	1/400	1/600
400mm	1/50	1/70	1/100	1/200	1/400	1/600
600mm	1/50	1/70	1/100	1/200	1/400	1/600

Lens choice also must be considered when choosing your minimum shutter speed.

Check out the chart to understand what is the slowest shutter speed you can choose before getting a blurry picture.

But this is not something you need to worry about when shooting on our cell phones.



# Fast Shutter Speed Assignment



- Find things that move FAST. .
  - EX: water from a hose, water balloon popping, someone jumping, hair flipping (when wet even better), etc.
  - You can super creative with this assignment. More ideas [here](#)
- The More Light the Better. Your Camera Phone needs a lot of light to get a fast shutter speed
- Check out your backgrounds! No distractions.
  - Use [Burst Mode](#) to capture your shots. After you have taken them, select your favorites and delete all the rest. Save your best 3.
  - For my Samsung users, check out [this tutorial](#)
- Take at least 3 photos of your subject and make sure they are frozen.

# Student Examples:



PIC•COLLAGE



PIC•COLLAGE

# Slow Shutter Speed & Light Painting

- Find a dark space to take pictures. The darker the better!
- Get a flashlight, or download the app Glow Stick. Finger lights and glow sticks work well too.
- Download the Slow Shutter Fast Cam App and set it up for light painting.
- Put your phone on a tripod or put it on a table and rest it on something heavy.
- Start drawing with light and release your shutter.
- You are likely going to have try several times to get a shot. If it doesn't come out right, manipulate your shutter speed length or the sensitivity. Be patient.
- Get 3 great shots onto a collage.



# Let's Watch How it's Done.



Set up your Slow Shutter Fast Camera App like what's pictured above. You can change the sensitivity if your pics are not coming out.