



Aperture Photography Group
Camera Skills Training
Shutter Speed

www.aperturephotographygroup.co.uk

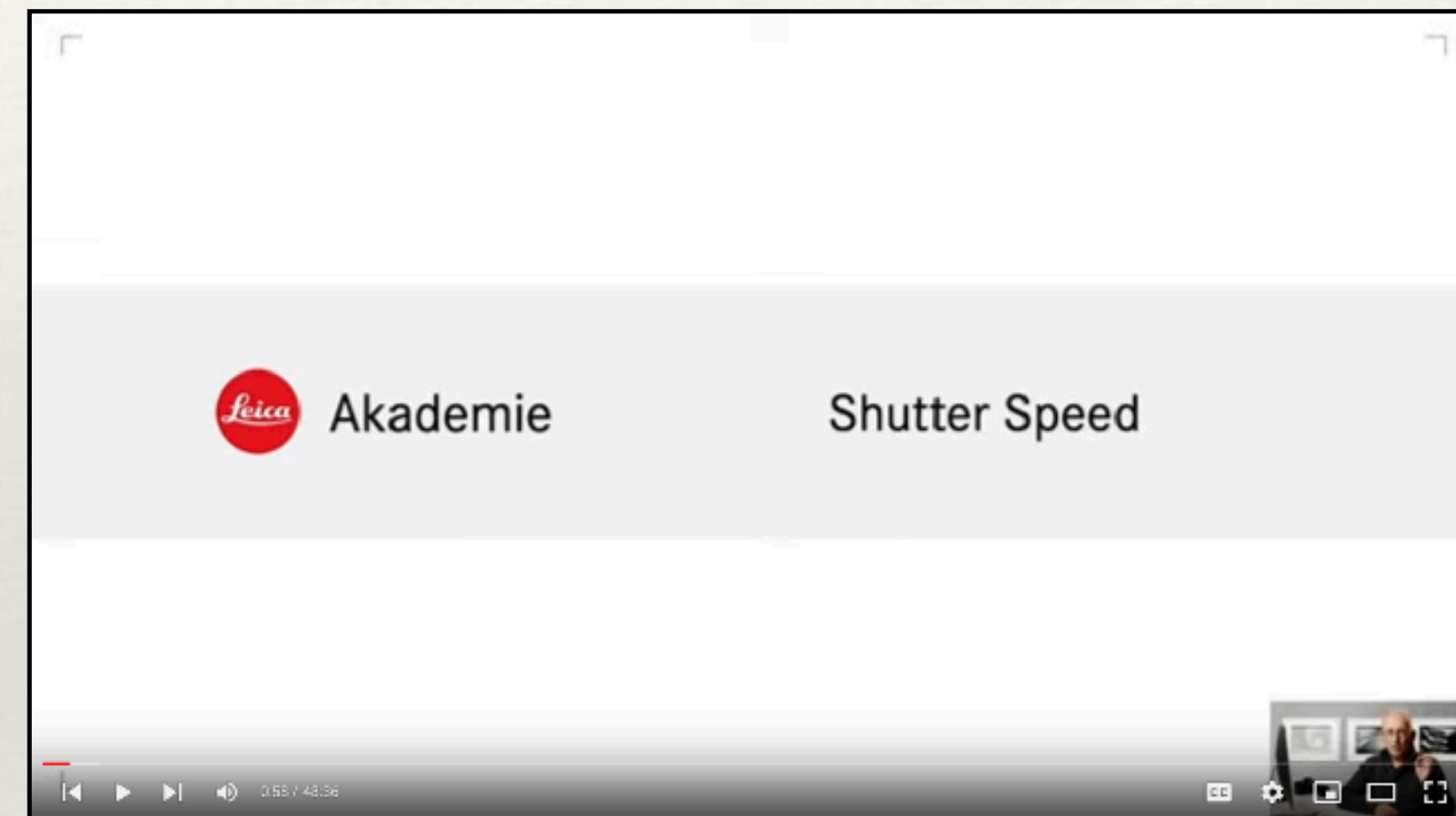


Camera Skills

Camera Skills

Tonight:

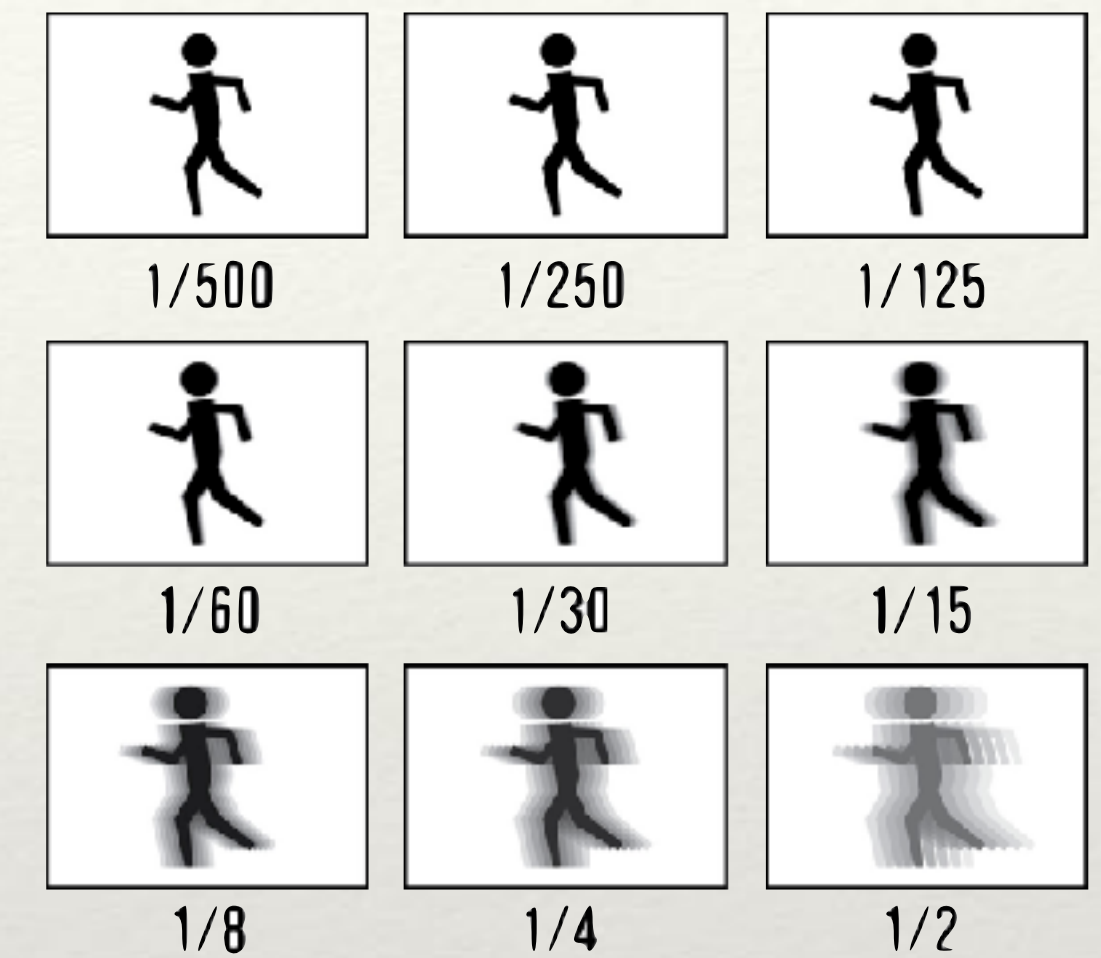
- ❖ Shutter Speeds
- ❖ Recap the key points from the Nick Rains video
- ❖ Q&A



Shutter Speeds

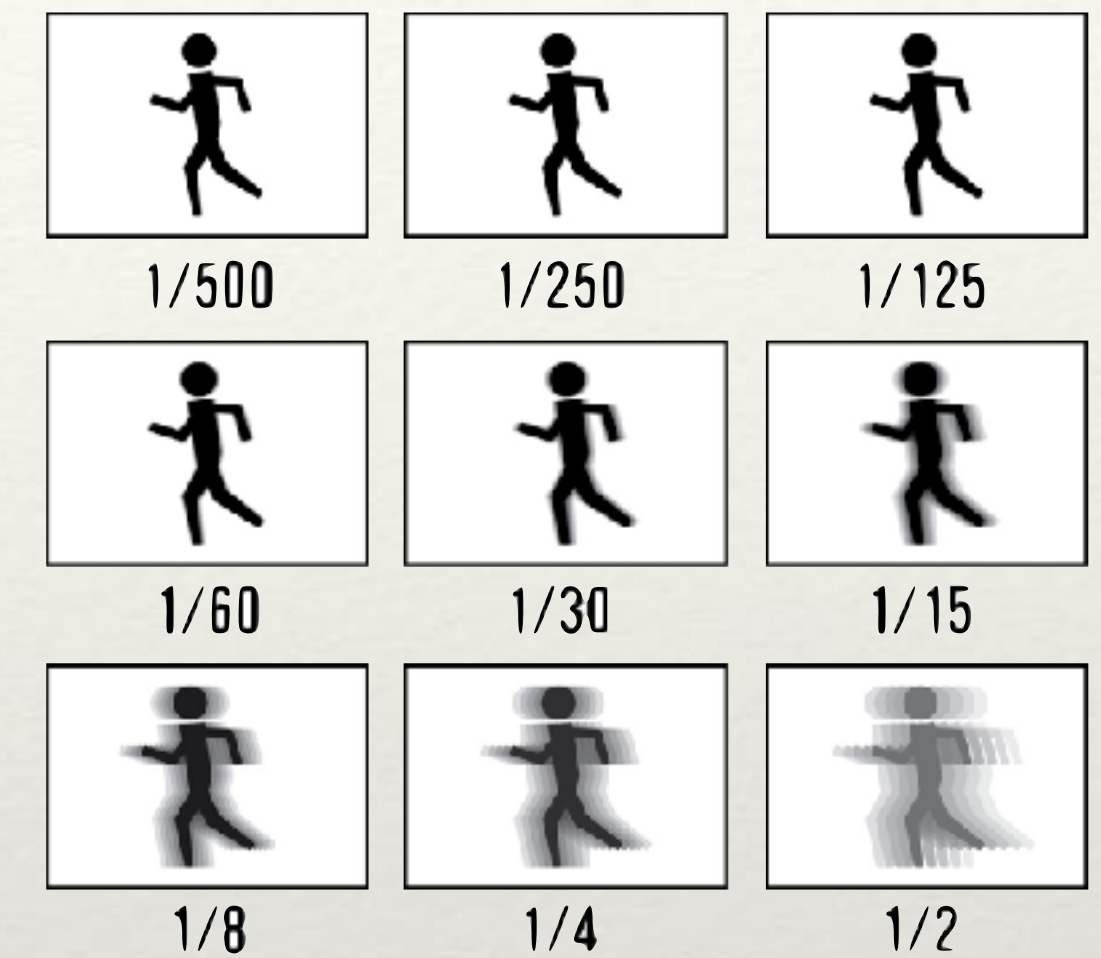
Definitions:

- ❖ Shutter speed is the *length of time* the camera shutter is open, exposing light onto the camera sensor.
- ❖ The shutter controls the time for which light falls on the sensor.
- ❖ Essentially, it's how long your camera spends taking a photo.



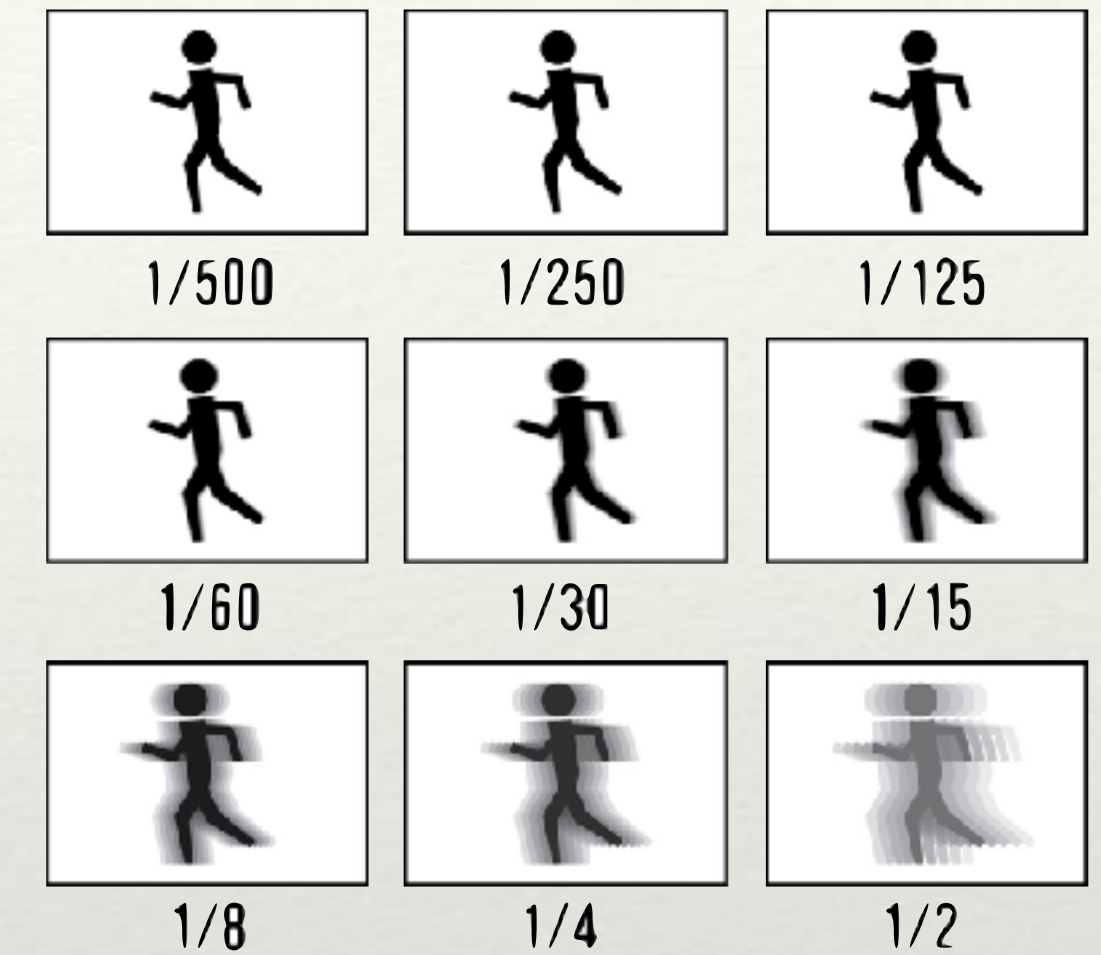
Shutter Speed

- ❖ A high shutter speed = a fast shutter speed
 - it will record a moving dot as a dot
- ❖ A high shutter speed will freeze movement.
- ❖ A low shutter speed = a slow shutter speed
 - it will record a moving dot as a line
- ❖ A low shutter speed will blur movement (will show motion).



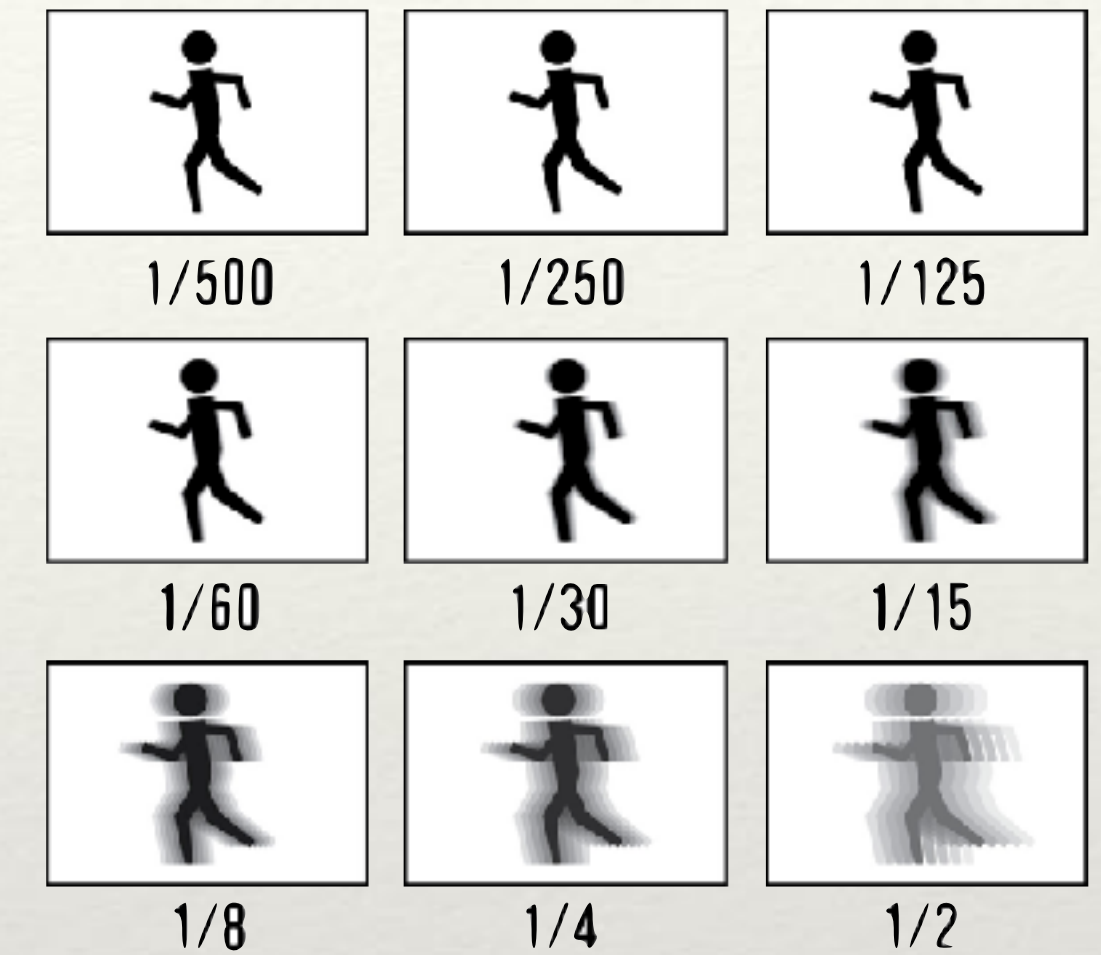
Shutter Speed

- ❖ Always check that you have a sufficient shutter speed to make an image, especially when:
 - ❖ Using Aperture Priority, or
 - ❖ Using zoom lenses that change minimum aperture as you increase focal length.



Shutter Speed

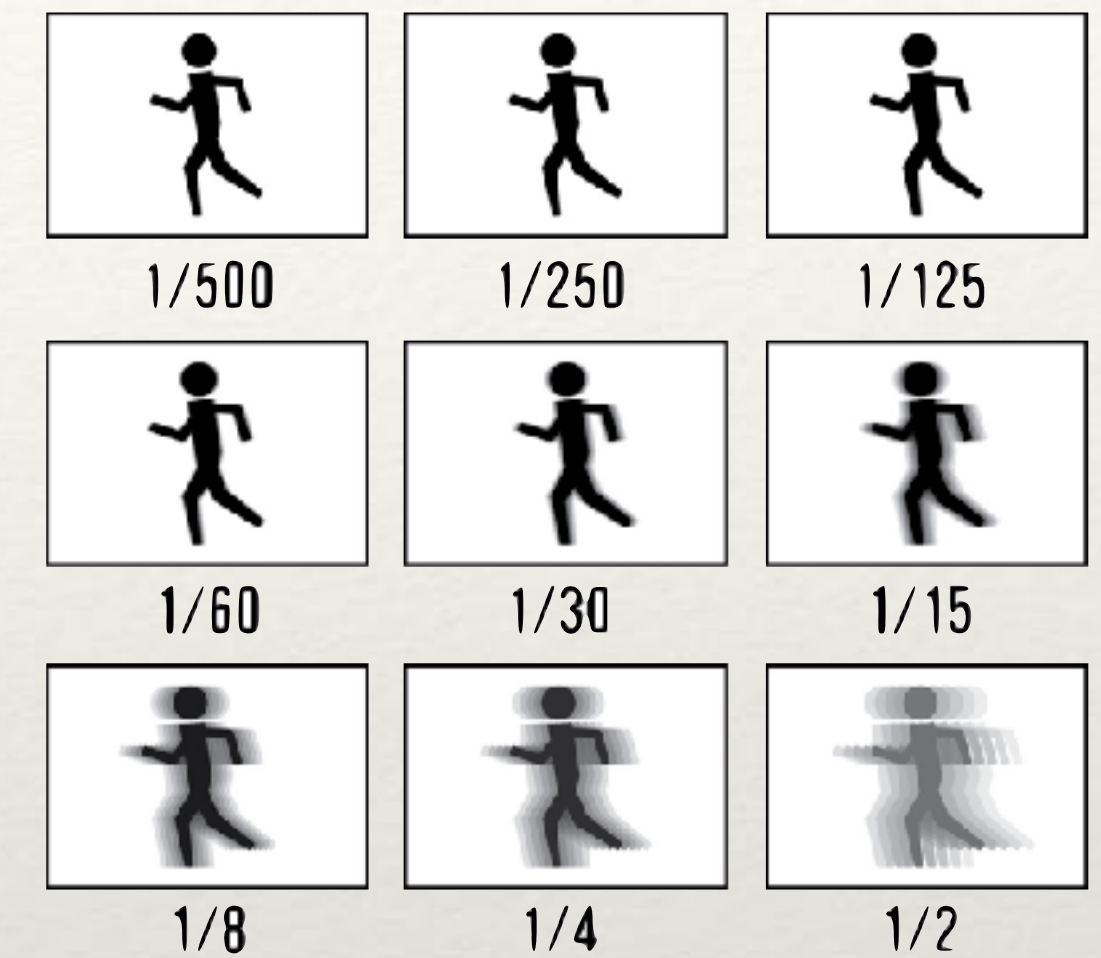
- ❖ Shutter speeds affect the capture of motion:
 - ❖ Subject motion,
 - ❖ Camera motion.
- ❖ Shutter speeds are only important when something is moving: the subject, the camera or both.



Shutter Speed

❖ Subject Movement

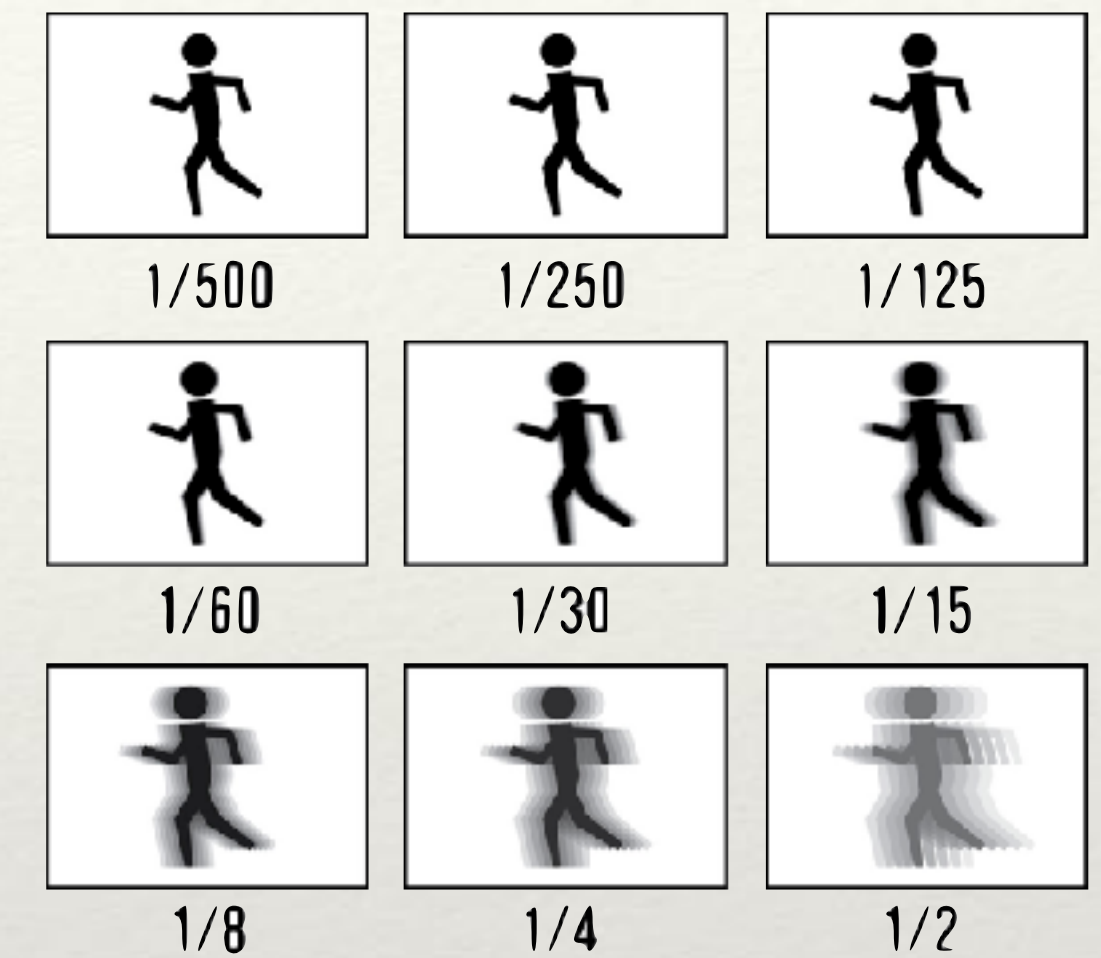
- ❖ Short / fast / high shutter speed = $1/500$ second and higher.
- ❖ Slow / long / low shutter speeds = $1/15$ second and lower.
- ❖ Medium shutter speed - between $1/15$ and $1/500$ second.



Shutter Speed

❖ Subject Movement

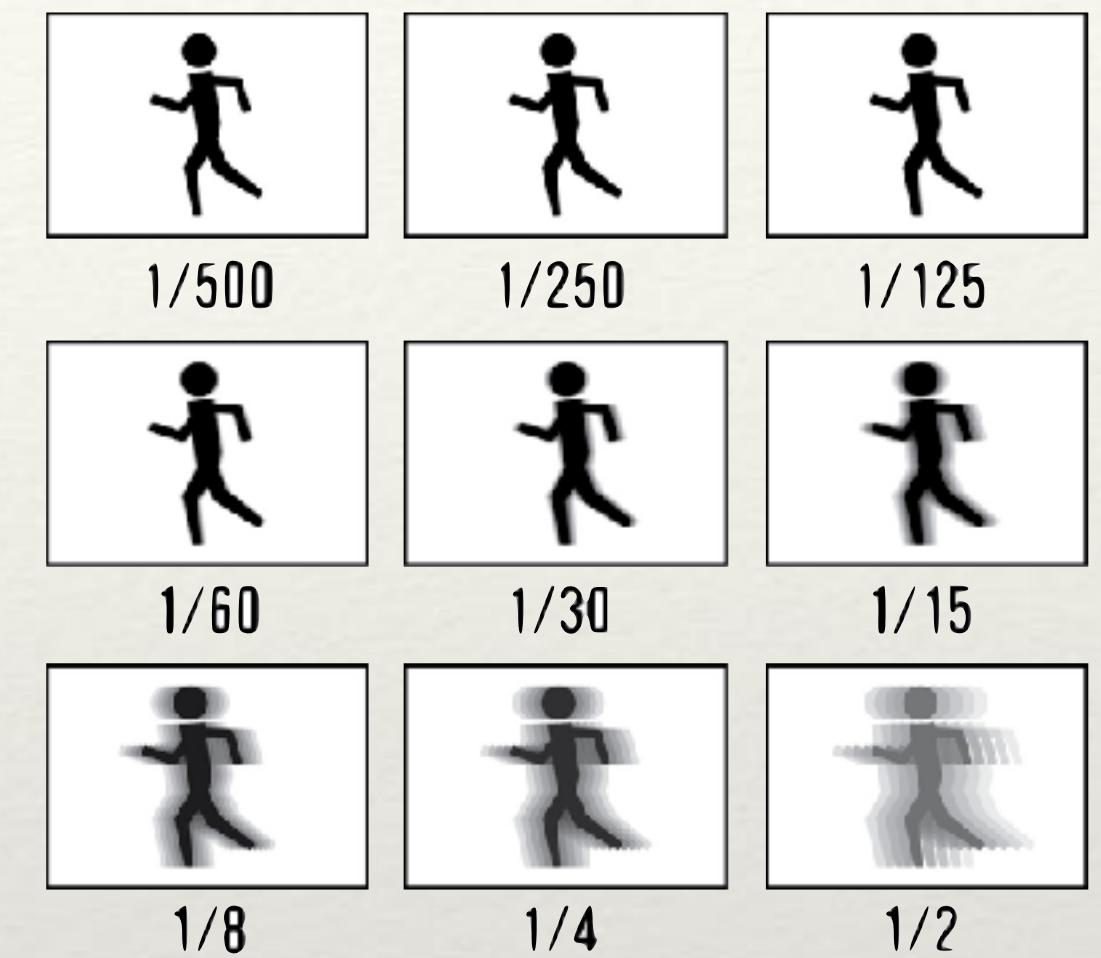
- ❖ Something moving fast, but is far away, has a relatively slow shutter speed
- ❖ Something moving fast, but is closer, has a relatively high shutter speed
- ❖ Something moving toward / away from you has a relatively low shutter speed



Shutter Speed

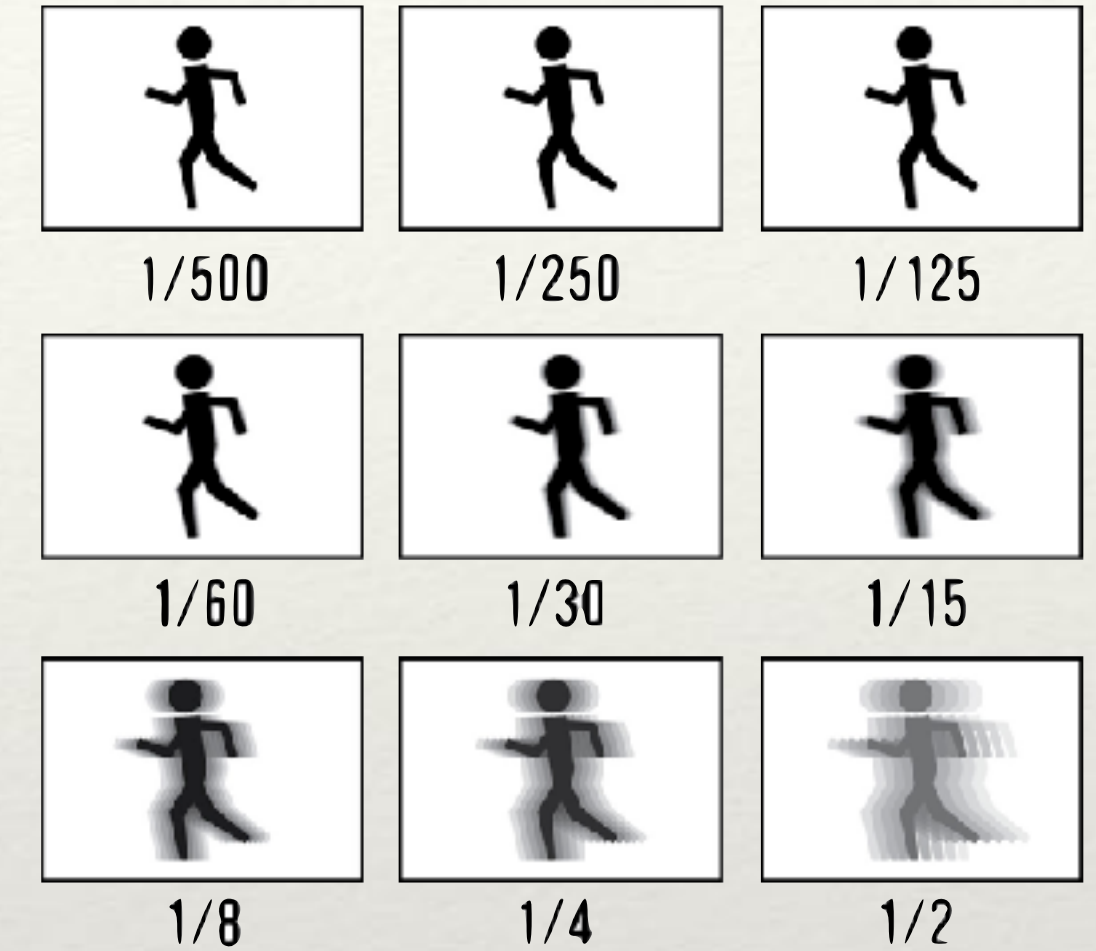
❖ Subject Movement

- ❖ The choice of shutter speed is a creative choice.
- ❖ Very slow shutter speeds will blur clouds and water.
- ❖ Neutral Density (ND) filters are used to help slow shutter speeds.
- ❖ For street photography use 1 / 500 second if you want to freeze motion.
- ❖ Panning is following a moving subject - you can use a slower shutter speed.



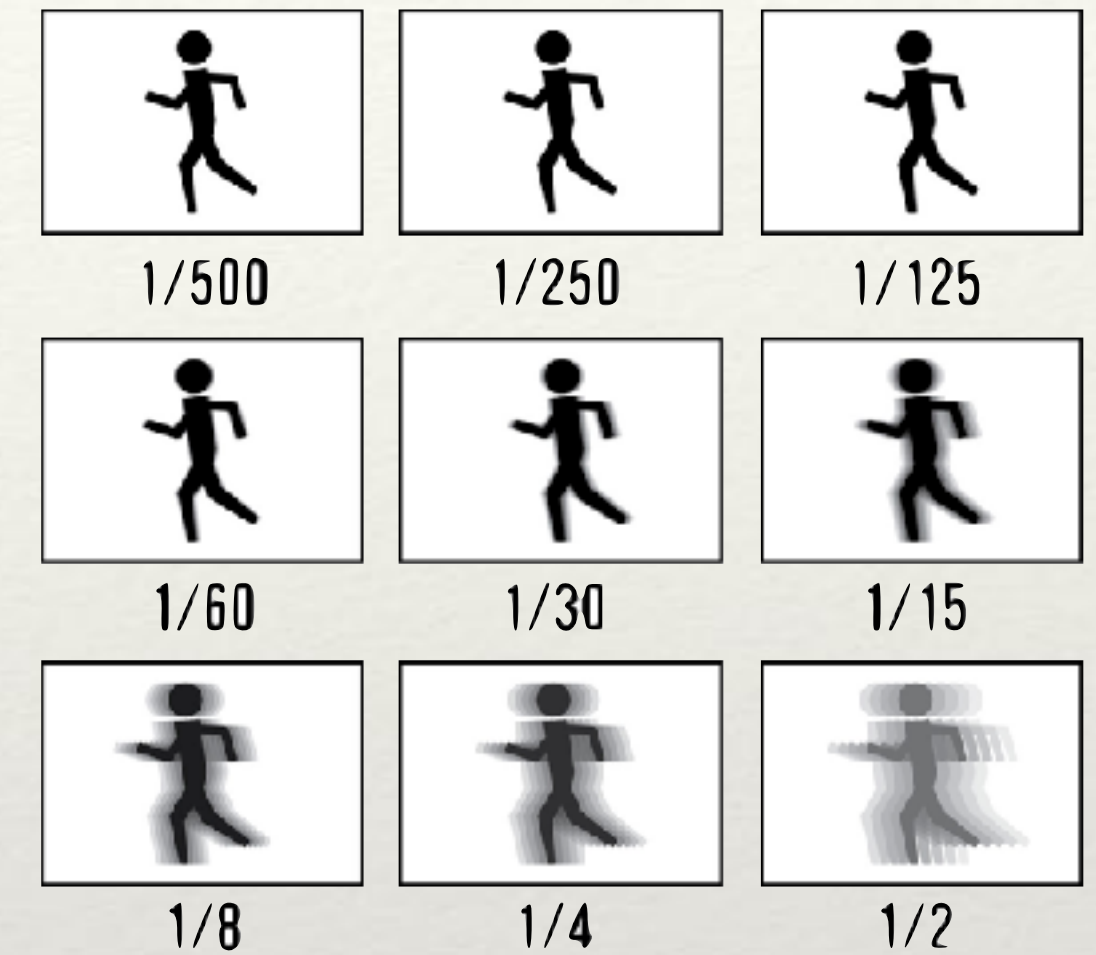
Shutter Speed

- ❖ **Camera Movement**
- ❖ If nothing in the image is moving, the shutter speed is irrelevant - BUT you may need to use a tripod to prevent camera motion for low shutter speeds
- ❖ The shutter speed needs to be set high enough to eliminate camera movement (unless you are using a tripod or image stabilisation in lens or camera)
- ❖ 50mm lens on a full frame camera = $1/50$, or preferably double that if you are hand holding - unless you are using image stabilisation.



Shutter Speed

- ❖ **Camera Movement**
- ❖ How you hold a camera is important for reducing camera movement
- ❖ Squeeze the shutter button gently; don't jab
- ❖ Use the viewfinder, rather than the LCD, to increase stability.



How to hold a camera

It's worth taking a few minutes to practise holding your camera before you start shooting – you'll get sharper shots



FINGER

The camera body is designed to be gripped with your right hand and your index finger over the shutter release. You should be able to press the button without having to reposition your grip.

HAND

Rest your lens in your left hand. You should be able to twist the barrel of the lens to zoom or focus with this hand, leaving your right hand to grip the camera body.

ELBOWS

Tuck your elbows into your body to keep your camera sturdy. The further out your elbows are, the more unstable you will be.

EYEBROW CONTACT

Lift the camera up to your eye and rest the viewfinder against your eyebrow. This makes another point of contact on the body for more stability.



PORTRAIT

If you need to switch your camera to a portrait orientation then turn it over so the shutter release sits at the top. If you do it the other way around your arms will become all twisted up!



LEGS

Place your legs a little apart so you're balanced. If you're leaning in to take a shot then move one foot forward to create a sturdier body shape.

TAKE A MAT

When kneeling to take shots outdoors, you might get a wet or dirty knee. Take a mat or a plastic bag to place under your knee for comfort and to avoid ruining your clothes.



BACK PANEL CONTROL

With your hands in the correct position, your thumb is well placed to access the controls on the back of the camera to alter the shooting settings.



BRING ONE LEG UP

By coming down into a crouching position and bringing your leg up you can turn your body into a human tripod. Place your elbow on your knee to connect your leg and arm together, creating a braced position so you don't wobble around.



REST ELBOWS

If you have a surface area in front of you, lean your elbows onto it to steady yourself. Look for level surfaces, such as a table or wall.



CONTROL YOUR BREATHING

Breathe out when you take a shot. If you hold your breath or breathe in, you'll find you move around a lot more. It's amazing how much of a difference controlling your breathing can make.



LEAN IN

Leaning against a wall creates instant support for your camera. This can be useful when shooting at slow shutter speeds without a tripod.



Shutter Speed

- ❖ Summary:
 - ❖ Shutter speed is the *length of time* the camera shutter is open, exposing light onto the camera sensor.
 - ❖ Shutter speeds are only important when something is moving: the subject, camera or both.
 - ❖ Shutter speeds affect the capture of of motion: Subject motion and Camera motion.
 - ❖ How you hold a camera is important for reducing camera movement.



Shutter Speed

❖ Q&A

