

What is Shutter Speed?

basically - shutter speed is 'the amount of time that the shutter is open'.

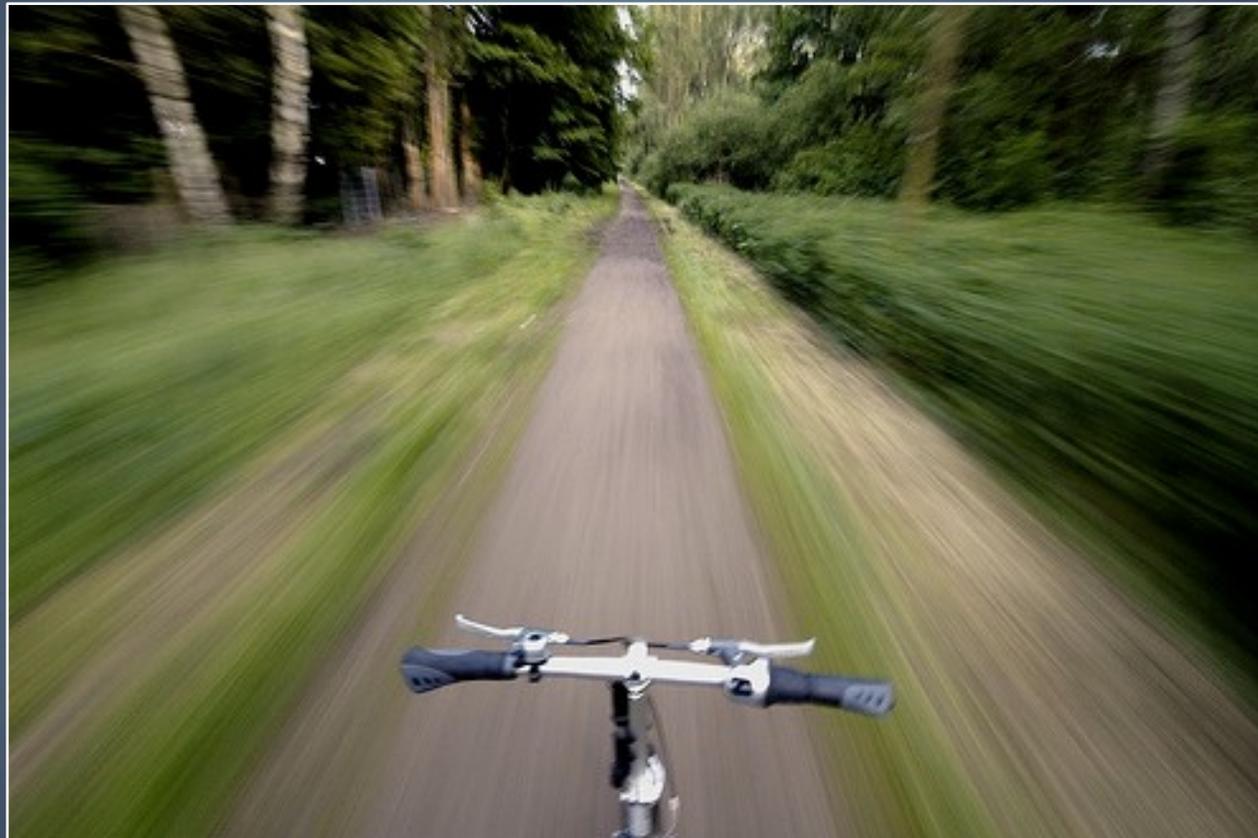
In film photography it was the length of time that the film was exposed to the scene you're photographing and similarly in digital photography shutter speed is the length of time that your image sensor 'sees' the scene you're attempting to capture.

Shutter speed can have a dramatic impact on the appearance of moving objects. Changes in background blurring are apparent from the need to adjust the aperture size to achieve proper exposure.





When considering what shutter speed to use in an image you should always ask yourself whether anything in your scene is moving and how you'd like to capture that movement. If there is movement in your scene you have the choice of either freezing the movement (so it looks still) or letting the moving object intentionally blur (giving it a sense of movement).

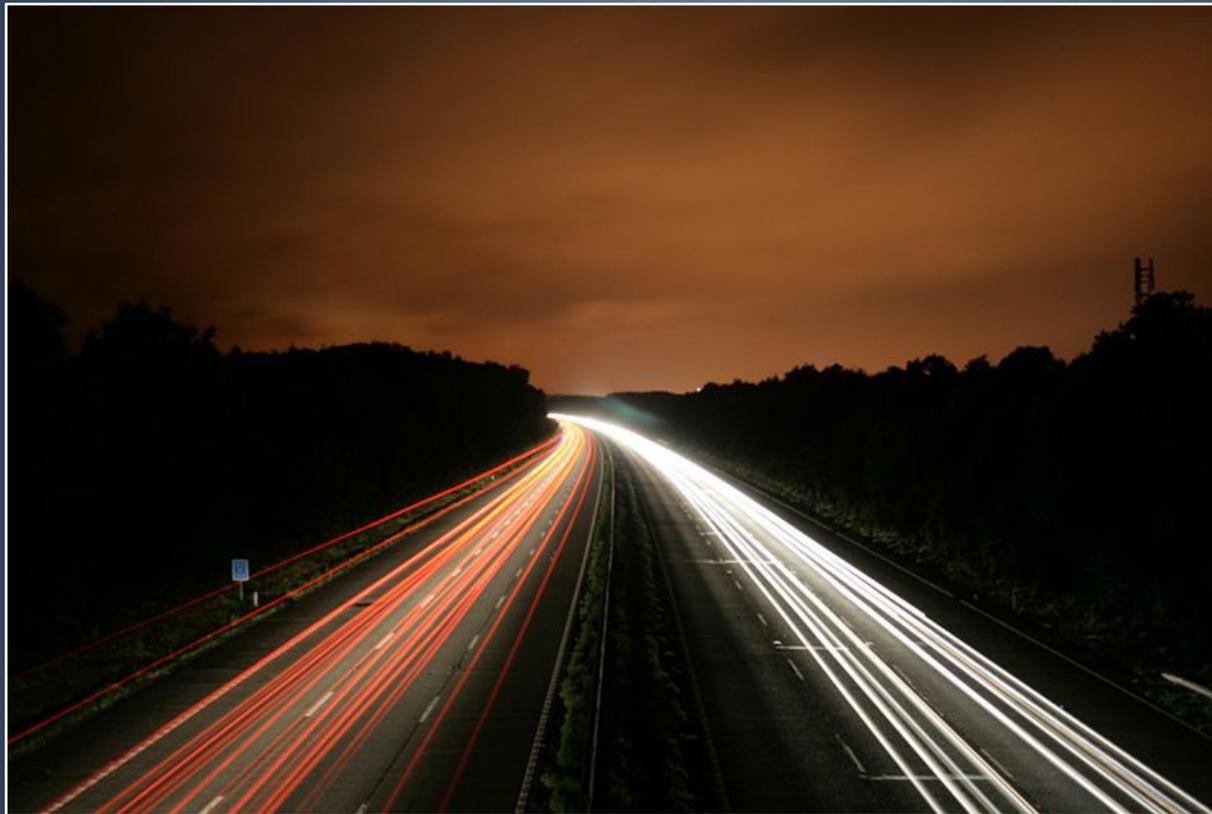


To freeze movement in an image (like in the surfing shot) you'll want to choose a faster shutter speed and to let the movement blur you'll want to choose a slower shutter speed.

The actual speeds you should choose will vary depending upon the speed of the subject in your shot and how much you want it to be blurred.



Bringing it Together - Remember that thinking about Shutter Speed in isolation from the other two elements of the Exposure Triangle (aperture and ISO) is not really a good idea. As you change shutter speed you'll need to change one or both of the other elements to compensate for it.



For example if you speed up your shutter speed one stop (for example from $1/125\text{th}$ to $1/250\text{th}$) you're effectively letting half as much light into your camera.

To compensate for this you'll probably need to increase your aperture one stop (for example from $f16$ to $f11$).

The other alternative would be to choose a faster ISO rating (you might want to move from ISO 100 to ISO 400 for example).



Motion blur is frequently employed in sports photography (particularly motor sports) to show a sense of speed. To achieve this effect it is necessary to use a slow shutter speed and pan the lens of the camera in time with the motion of the object



























Adding creativity

Working with movement
move your camera during exposures



Pan to follow moving targets





Zoom while shooting

