

The Classroom Collection

S h u t t e r S p e e d

“Photography takes an instant out of time, altering life by holding it still”

— *Dorothea Lange*

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Shutter Speed



1/2 second @ f/2.8

Shutter speeds are both a technical and aesthetic choice a photographer needs to make before releasing the shutter.

Shutter Speed



1/30 @ f/22

The shutter inside your camera controls the duration of time the sensor is exposed to light.

Shutter Speed



1/15 second @ f/5

Capturing blur or motion in your photograph can emphasize movement and add drama.

Shutter Speed



1/4000 @ f/3.2

A fast shutter speed is often utilized to freeze the movement of a subject.

Shutter Speed



1/6 @ f/22

A slower shutter speed can be used to show motion and visualize movement.

Shutter Speed

$1/8000$ - $1/4000$ - $1/2000$ - $1/1000$ - $1/500$ - $1/250$ - $1/125$ - $1/60$ - $1/30$ - $1/15$ - $1/8$ - $1/4$ - $1/2$

1 second - 2 seconds - 4 seconds - 8 seconds - 15 seconds - 30 seconds

Shutter speeds are expressed as seconds or fractions of seconds.

Shutter Speed



As a general rule to prevent unintentional camera shake you should avoid handholding your digital cameras at shutter speeds slower than $\frac{1}{2 \times \text{Focal Length}}$

Example: When using a 200mm lens avoid using a shutter speed slower than $\frac{1}{400}$

Shutter Speed



1/13 @ f/6.3

Using a tripod can help eliminate camera shake when using slower shutter speeds.

Shutter Speed



1/13 @ f/9

The visual blur and suggestion of movement occurs because the subject is moving against a static background.

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Shutter Speed



1/8 second @ f/6.3

Layering motion of different subjects moving different directions at different speeds can set up interesting dynamics within a photograph.

Shutter Speed



1/800 @ f/5.6

Fast shutter speeds can make normal subjects appear to freeze in the air.

Shutter Speed



1/4000 @ f/3.2

When photographing people running relatively close to the camera a shutter speed of 1/1000 second or faster should freeze most motion.

Shutter Speed



1/4000 @ f/3.2

The distance the subject is from the camera, the speed of the subject, and the focal length of the lens will affect whether the subject is **sharp** or blurred.

Shutter Speed



1/5 second @ f/13

The distance the subject is from the camera, the speed of the subject, and the focal length of the lens will affect whether the subject is sharp or **blurred**.

Shutter Speed



1/15 @ f/8

For capturing subject movement the **focal length** of the lens, the **distance** your subject is from the camera, the **direction** it is moving, and the **speed** your subject is moving all affect how the motion is captured.

Shutter Speed



1/13 @ f/5

Slower shutter speeds can help convey the idea of motion and movement.

Shutter Speed



1/25 @ f/6.3

Slow shutter speeds combined with panning can help isolate the subject from a busy and distracting background.

Shutter Speed



2 seconds @ f/6.3

A tripod combined with a long exposure can capture the fireworks' trails.

Shutter Speed



6 seconds @ f/16

Water movement can be emphasized with long exposures.

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Shutter Speed



.8 seconds @ f/5.6

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S h u t t e r S p e e d

Review – Shutter Speeds

Camera Shutter controls the duration of time sensor is exposed to light

Shutter Speeds Expressed as seconds and fractional seconds

Fast Shutter Speeds Use to freeze motion

Slow Shutter Speeds Use to show motion and visualize movement

S h u t t e r S p e e d

Vocabulary Study Words

Shutter Speed

Focal Length

Camera Shake

Subject Blur

Subject Pan

Shutter Speed



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