

# 7 Quick Exposure Lessons

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## 1. Less light = Longer shutter speed

Shutter speed controls how long the shutter is open, therefore how long the sensor is exposed to light. The less light you have the longer the shutter needs to remain open to get enough light to the sensor. (*Aperture & ISO come into play, too.*)

## 2. Increased action = Faster shutter speed

Shutter speed affects motion blur, whether from a moving subject or camera movement. A fast shutter speed will freeze the action while a slower shutter speed will show blur.

## 3. Aperture = Lens opening

The aperture is how large the opening is in the lens. A larger aperture lets more light hit the sensor.

## 4. Smaller number = Bigger opening

Aperture is a fraction. Think of a pie: the fewer pieces you cut it into the bigger each piece is. Therefore  $f/4$  is actually a larger aperture than  $f/16$  as  $\frac{1}{4}$  is larger than  $\frac{1}{16}$ . Would you rather  $\frac{1}{4}$ <sup>th</sup> of a pie or  $\frac{1}{16}$ <sup>th</sup>? (*If it's pecan I'll take the fourth; pumpkin, well, I'll pass!*)

## 5. Smaller opening = Bigger depth of field

The smaller the lens' opening the more depth of field you get. A smaller aperture, such as  $f/11$  or  $f/16$ , gives more depth of field than a larger aperture such as  $f/4$  or  $f/5.6$ . Remember: the bigger the number the smaller the opening.

## 6. ISO = Sensor sensitivity

ISO is a measure of how the signal from the sensor is amplified. For most cameras the base ISO is 100 and any value above that is just an amplification of the captured image. Each time you double your ISO your camera needs half as much light.

## 7. Higher ISO = More noise

The goal is to keep the ISO as low as you can because the more the signal is amplified (*by upping the ISO*) the more “noise” is introduced. However, don’t be afraid to raise that ISO if you need a faster shutter speed! Noise reduction can work wonders, but nothing can be done after the fact with a blurry capture. Today’s cameras work well at ISO’s higher than ever before.

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**Award-winning nature & wildlife photographer, Jeff Parker, leads photo tours & workshops for the naturally curious throughout North, Central & South America – & now India. Please join him!**

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