

Balancing Light

photography tips



The three main ways to control light in your camera is to change the values for the:

- 1) Shutter speed (how fast the shutter opens and closes)
- 2) Aperture / f-stop (how big or small the lens opening is)
- 3) ISO (film sensitivity)

Each of these changes impacts the light or dark level of your photo. However, each of these ALSO makes a separate change to the image.

- 1) Shutter speed affects how freeze-frozen or time-motion-blurred the image is
- 2) Aperture affects how much of the image is in focus, i.e. if the background gets soft / fuzzy
- 3) ISO affects how noisy or clean the image is

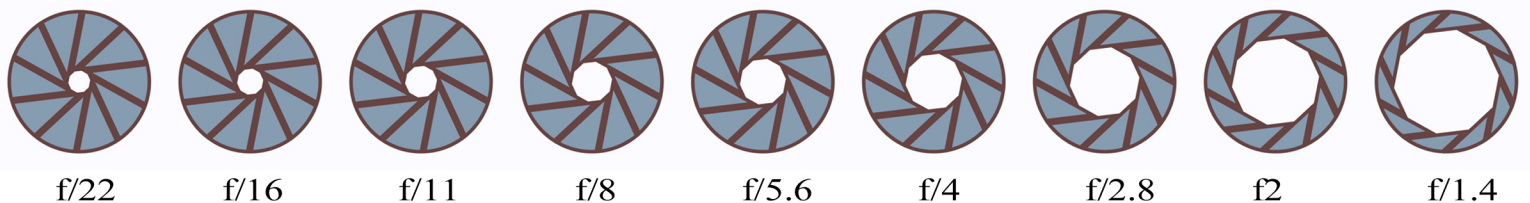
Depending on the type of image you want to take, you might care more about one thing and less about another. For a stationary flower, you might want the background blurry. For a moving racehorse, you might care more about freezing the racehorse mid-stride.

The left side of the chart needs lots of light. You need lots of light if your shutter is only going to be open 1/500th of a second. It needs lots of light if your aperture is tiny and only letting a little light in. It needs lots of light if your film has a low sensitivity.

For the same reasons, the right side of the chart is fine in low light.



Shutter speed shown in fractions of one second



A smaller f/value (to the right) creates a smaller depth of field, less is in focus



A higher ISO works fine in low light but generates a noisier image



Needs Lots of Light

OK with Low Light