

$$f22 : 1/4 = f8 : 1/30 = f2.8 : 1/250$$



Balancing Shutter and Aperture:

Exposure is about different combinations of shutter and f-stop settings. These combinations can drastically affect the finished picture. For example, the following three pictures have been given an equal amount of light, but the f-stop and shutter combinations make each one unique.

Why is the background all blurred in the right picture, and sharpest in the left ?

Because if the exposure is made with a wide aperture (like f2.8), then objects farther away from the subject are thrown farther out of focus. This effect is referred to as "depth of field"

So.. if the aperture is small (like f22) then objects in the background (and foreground) will appear sharper. However, since more light was required to make the exposure on the left (1/4 Second) the subjects became blurred from MOTION. At 1/250th of a second, the shutter is fast enough to freeze motion.

Take a stop, Give a stop...

Since f-stop and shutter are both measured in stops, keeping balance is easy. If you take away 2 stops from the aperture, you can give 2 stops back with the shutter and end up with the same exposure level.