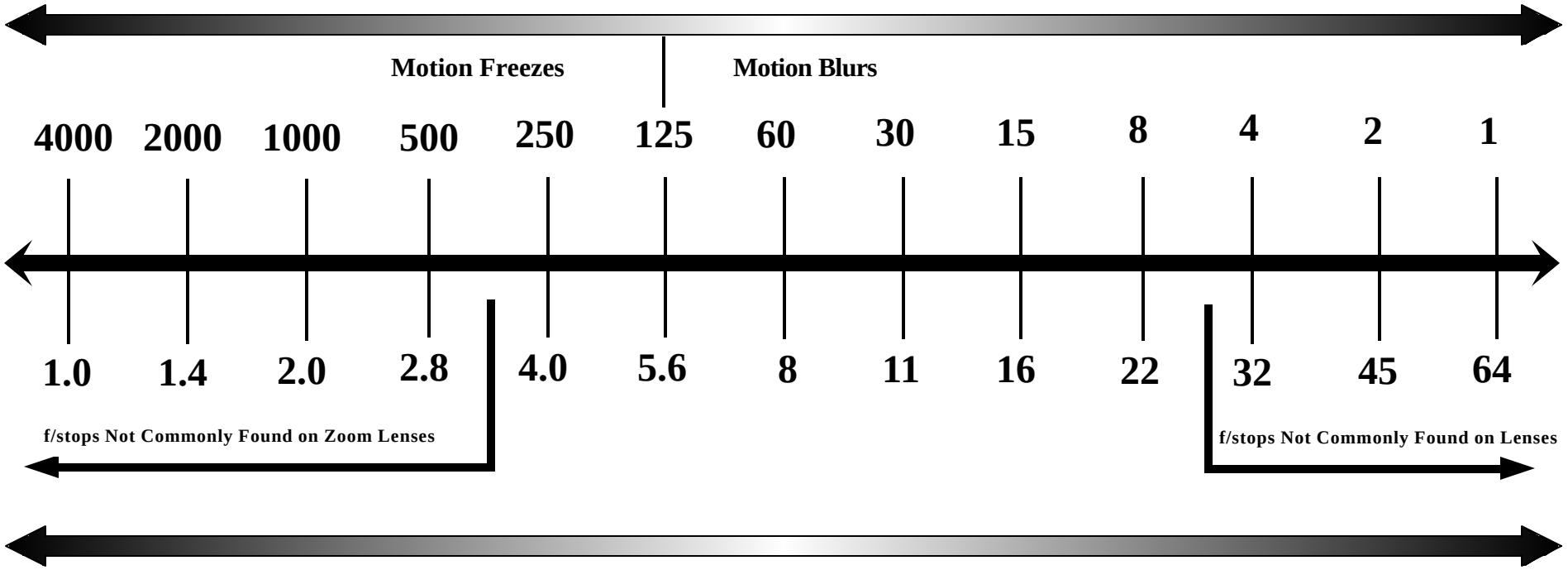
Shutter Speeds

The **shutter** is a mechanical system used by the camera to control the amount of *time* an exposure is made. Note: The shutter speeds below are abbreviated and really should be expressed as 1/x of a second. Ex: 125 is read as 125th of a second. Note also that every change in shutter speed is either double or half of the previous speed.

Reciprocity - A reciprocal relationship between shutter speeds and apertures. Exposure = Intensity x Time.

If correct exposure for a given photo situation is 125th of a second at f 5.6, than all the other combinations listed below will also produce the same correct exposure but can produce different visual effects on the image. To further understand this relationship, cut this sheet through the arrow separating the shutter speeds from the apertures and observe the relationships as you match different shutter speeds and apertures.

Camera Support Recommended If Shutter Speed is Less Than Focal Length of Lens



Depth of Field Decreases

Depth of Field Variables

- **f/stop**
- **Subject Distance**
- **Focal Length**

Depth of Field Increases

Apertures

The **aperture** is the opening in the lens diaphragm which controls the *amount* of light entering the camera. The different openings are designated as "f" numbers and are referred to as f/stops. The smaller the f/stop number the larger the opening. Note: Even though it is not as mathematically apparent as shutter speeds, every change in aperture is either doubling or halving the lens opening.