

Name _____

Date _____

Engineering Technology Department

Period _____

Stop Action & Blurred Motion

Stop Action

- **Shutter Speed**

If you want to freeze the action, with no blur, without using a flash, you need to use a fast shutter speed. How fast? Giving a concrete answer is impossible, because there are a vast number of variables that are constantly changing and they have an impact on the result of the final image. A few of these include:

- **Freezing Obvious Action**

One key factor to keep in mind when trying to stop the action in your photos is that you need to make sure that the photo conveys motion. For example, if you capture moving vehicles and shoot fast enough to freeze the cars and the background, the cars will look like they are parked. In order to convey motion, you need to freeze obvious motion or show some movement blur.



- **Focusing on Moving Subjects**

When shooting moving subjects it's best to use Auto Focus (AF). Set your AF to Continuous (AF-C ~ Nikon) to allow the camera to re-focus as the subject moves. Using Continuous or press the shutter release halfway down as you move the camera to follow the moving subject. This will activate the AF system and the lens will continuously re-focus to calculate the speed and direction of the subject. The lens is then adjusted to focus at the predictive location when the shutter is opened.

When you have acquired a focus on the subject, press the shutter release all the way down.

Blurred Motion

- **Shutter Speed**

If you want to blur the action, you need to use a slow shutter speed. How slow? Giving a concrete answer is impossible; the variables that applied for stop action images also apply for blurred motion.



Zooming Blur

- Another interesting technique is to change the zoom during the exposure itself (often called a "zoom burst"). You can achieve this look by setting your camera on a tripod, and using a shutter speed of 1/15 to 1/2 a second while twisting the lens's zoom ring. Avoid moving the camera itself – camera shake!!!!



How to compensate for lighting

- **Fast Shutter Speeds When There Is Too Little Light**
In order to compensate for the limited amount of light that a faster shutter speed lets into your camera choose a higher number ISO.
- **Long Shutter Speeds When There Is Too Much Light**
In order to compensate for the extra light that a longer shutter speed lets into your camera choose a lower number ISO.