Names:
This is an aperture chart.

## Size of Aperture: Large vs Small Aperture


f/2.8

f/4

f/5.6

f/8

f/11

f/16

Each aperture number lets in half, or twice the amount of light as the aperture beside it. For example, f 4 lets in twice as much light as $f 5.6$, but half as much as $\mathfrak{f} 2.8$.

Each one of the apertures above is called a "stop"
In photography, a "stop" is simply an agreed upon aperture or shutter speed that admits half as much, or twice as much light as the setting on either side of it.
Agreed upon apertures start at $\mathrm{f} 1, \mathrm{f} 1.4, \mathrm{f} 2, \mathrm{f} 2.8$ and so on.

## 1. Starting at f1, write the apertures up to and including f64 in order in the space below

For shutter speeds, we deal with shutter speeds in seconds, and fractions of seconds. On a camera dial, the number 60 refers to $1 / 60$ th of a second shutter speed. On a digital camera, if the display shows 4 ", your exposure time will be 4 seconds, if it shows 4 , it will be $1 / 4$ "

Shutter speeds, like aperture, have an agreed upon standard where the shutter speed on either side of a given shutter speed will be either half, or twice as fast as the given shutter speed.

For example, on a camera shutter speed dial you will see that the 30 on the shutter speed dial is sandwiched between 15 and 60 . Note that these are fractions, not whole seconds.


This system allows you to change camera controls to suit the type of photo you are taking even without using a light meter (which of course, you will use), but is more useful to understand how to adjust your camera on the run.

## 2. Starting with 8 seconds, in the space below, write the shutter speeds up to and including $1 / 1000^{\prime \prime}$ that would be found on a camera shutter speed dial as they get faster

Exposures are given with 3 details (we'll learn the 3rd one soon) The correct way of stating what camera setting was used is by the shutter speed, and then the aperture. For instance "I shot this photo at 1/60th of a second at f8". This would be written as "1/60"@f8"

Once you start to understand stops, you see that you can use shutter speed and aperture creatively. Different combinations will allow the same amount of light in, but will result in different looking images.
3. In the space below, write 3 different shutter speed and aperture combinations that will allow the same amount of light in as 1/60"@f8"

