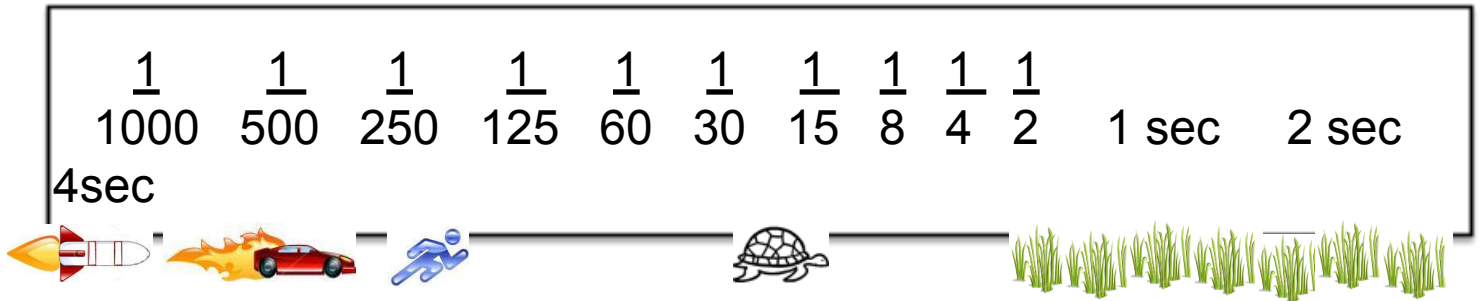


# Shutter

Traditional Shutter Speeds have been used for over 100 years !

(Modern cameras let you pick numbers in-between)



The numbers on the camera show only the **BOTTOM** of the fraction.....

125 means 1/125 of a second.

## How the shutter speed affects the photo

A faster shutter speed records **LESS** movement  
A slower shutter speed records **MORE** movement

At 250 the rollerblader is **FROZEN**  
At 30 the rollerblader is **BLURRED**

Something **NOT** moving can have any shutter speed,  
as long as the **CAMERA** does not move.



**Long Shutter Speed at the fair**  
1/15 second on a tripod



**The feel of Action & Movement**

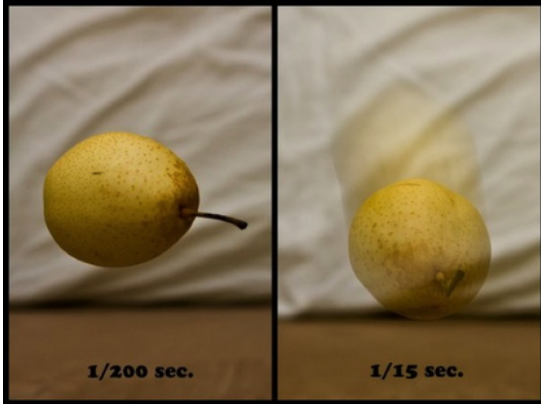
1/30 second panning the camera to match the movement

**T-V** means "Time Value",

more commonly called "**Shutter Priority**"

You select the shutter speed you want to use,  
and the camera will automatically pick the ISO  
and/or f-stop to match the correct exposure.

# Shutter Speed Practice



**Objective** - Understand how shutter speed affects motion in an image.

**What is Due** - 15 photos using the shutter speeds listed below.

All photos will be shot in shutter priority mode (TV). You control the shutter speed in shutter priority mode while the camera controls the other settings to get a correct exposure. Make sure ISO is set to Auto. You will also practice controlling focal points and focus locking.

Students will work in pairs for this assignment. Each group will need a tennis ball, tripod, and a camera. One student will drop the tennis ball while the other student captures the photos of the moving ball. Set the focal point to the center. Have the student with the ball hold it centered in the frame while the other student pushes the shutter button halfway to focus on the ball. Then move the ball out of the frame, drop it, and the student with the camera pushes the shutter button down the rest of the way to capture the object. This will need to be repeated for both people in the group.

*Every student needs to take his or her own photos!*

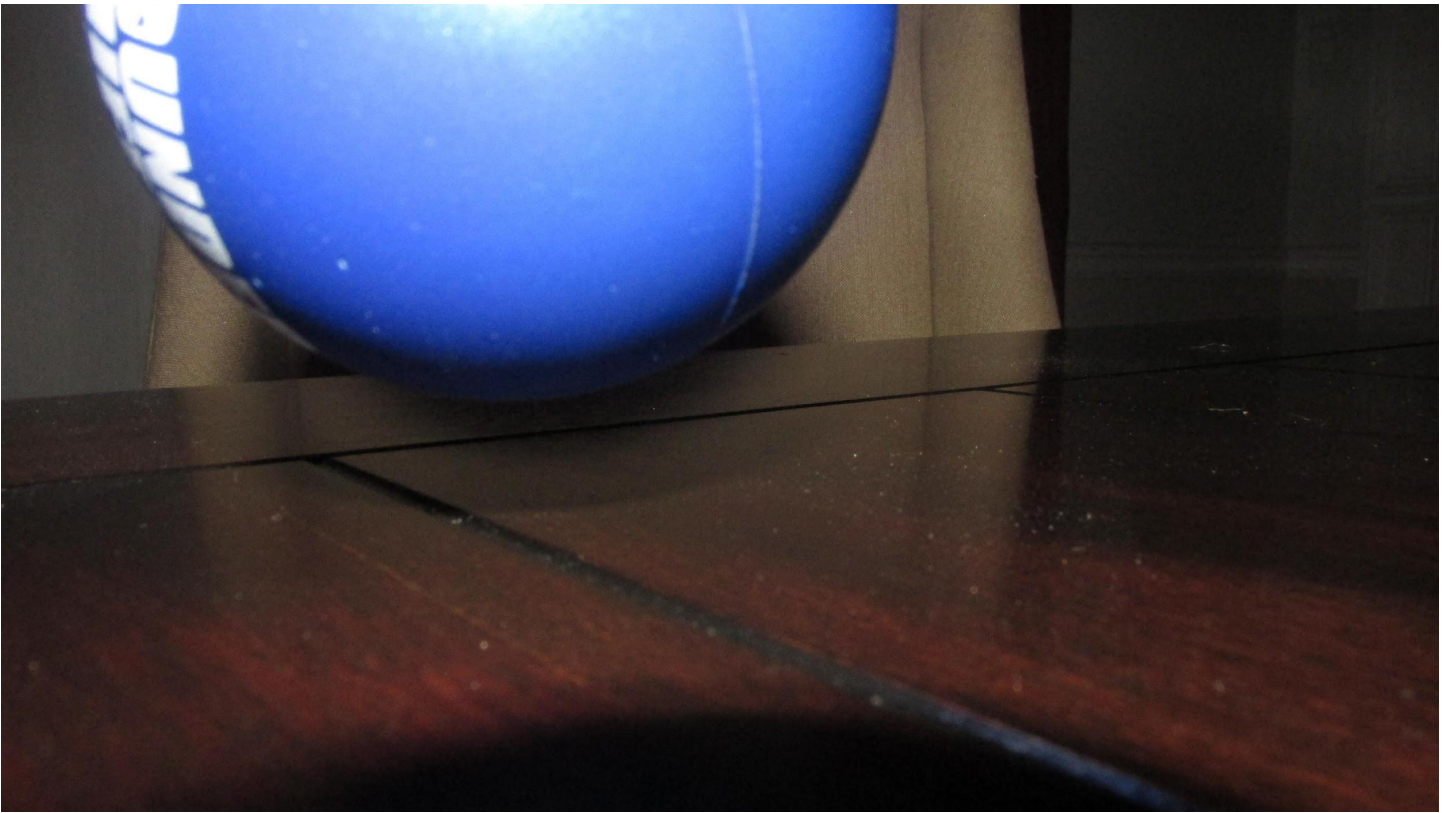
Photos need to be taken at the following shutter speeds:

**1/1000, 1/500, 1/250, 1/125, 1/60, 1/30, 1/15, 1/8, 1/4, 0"5, 1", 2", 4", 8", 15"**

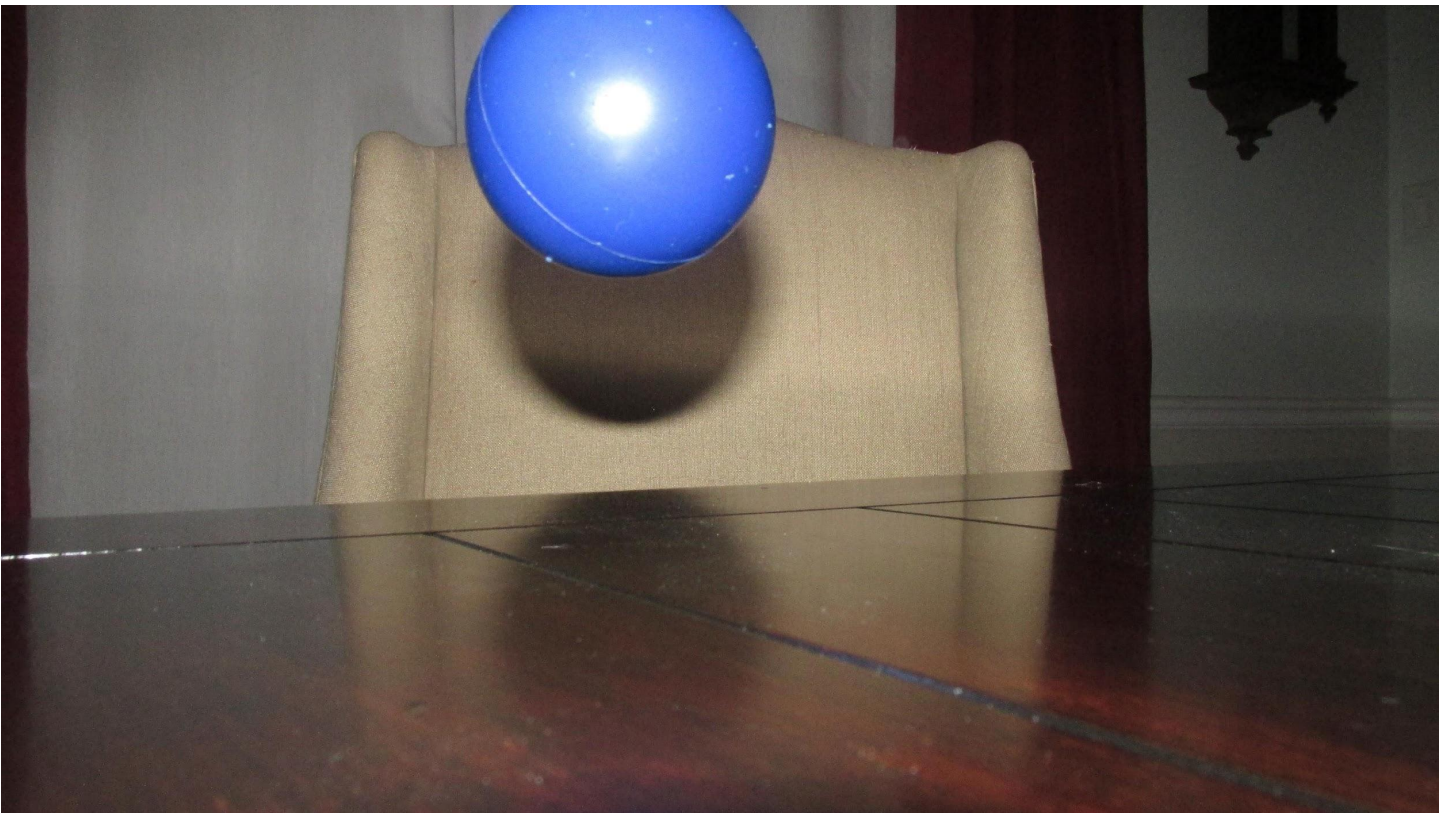
## **How to turn in your work:**

Create a Google Slideshow and make the title of the first slide "Tennis Ball". Add one slide for each photo.

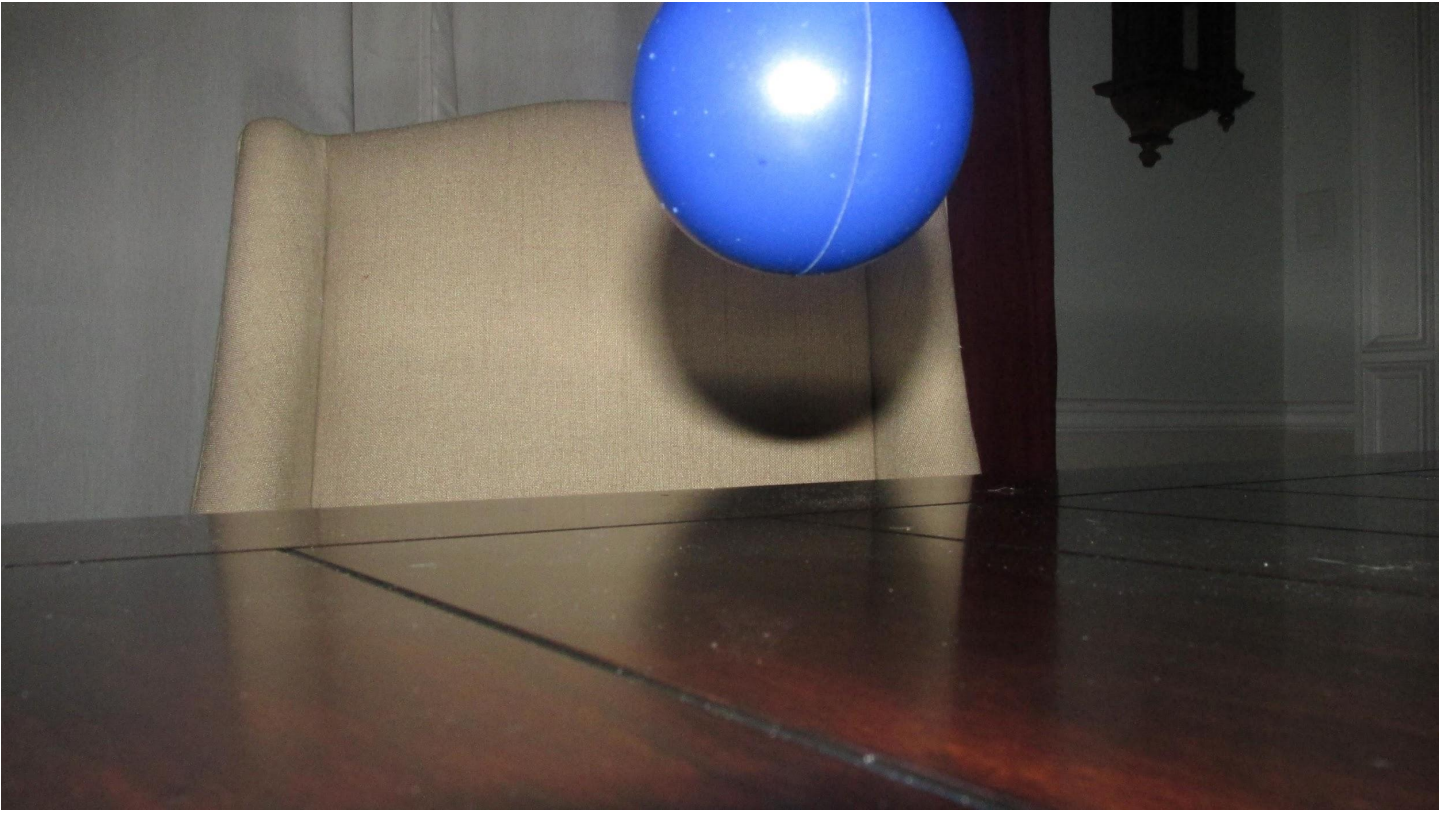
Insert a text box onto each slide and add the shutter speed used for that photo. Put your photos in order from fastest shutter speed to slowest shutter speed.



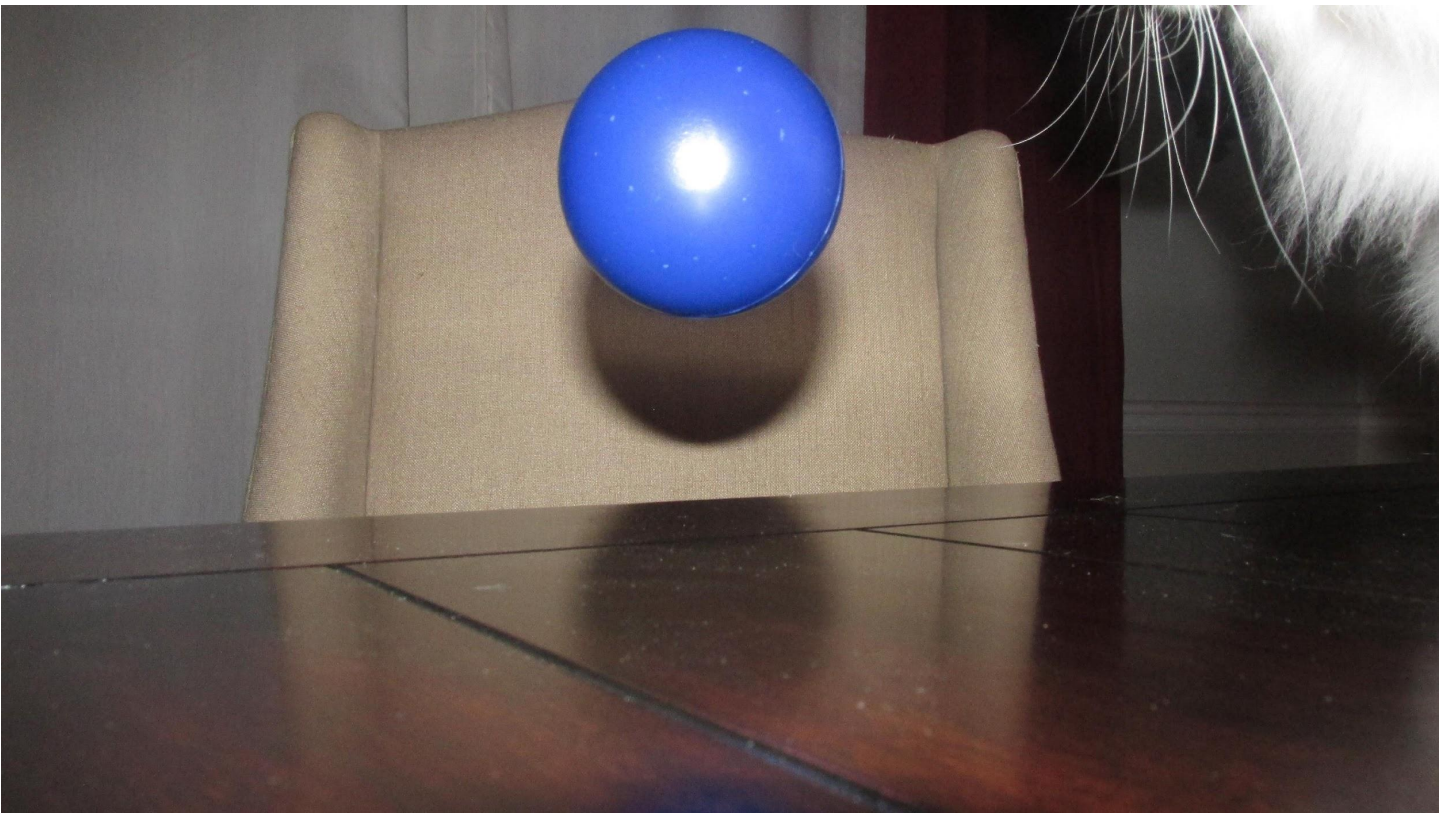
1/1000 f5.0 ISO 400



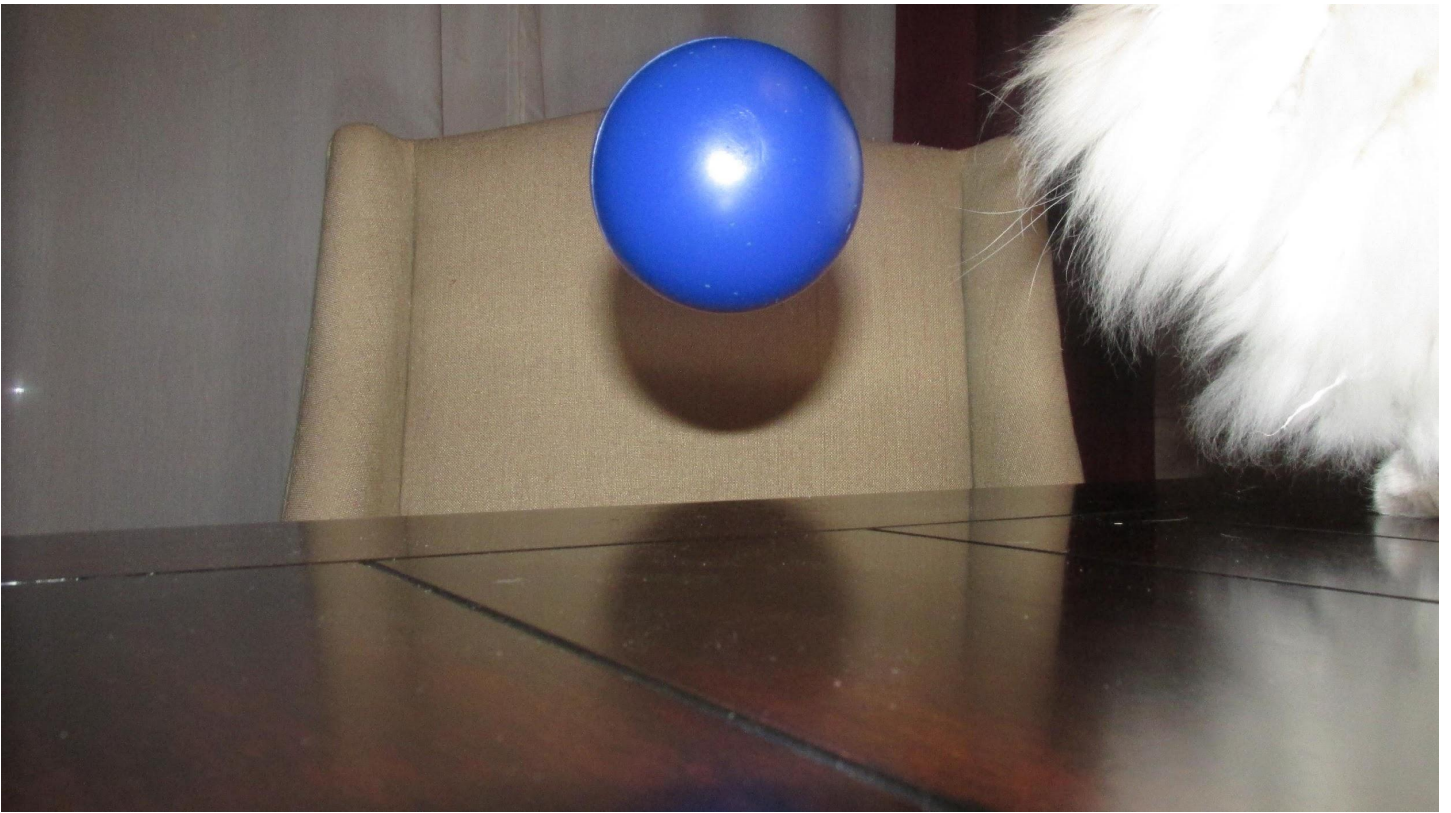
1/500 f5.0 ISO 400



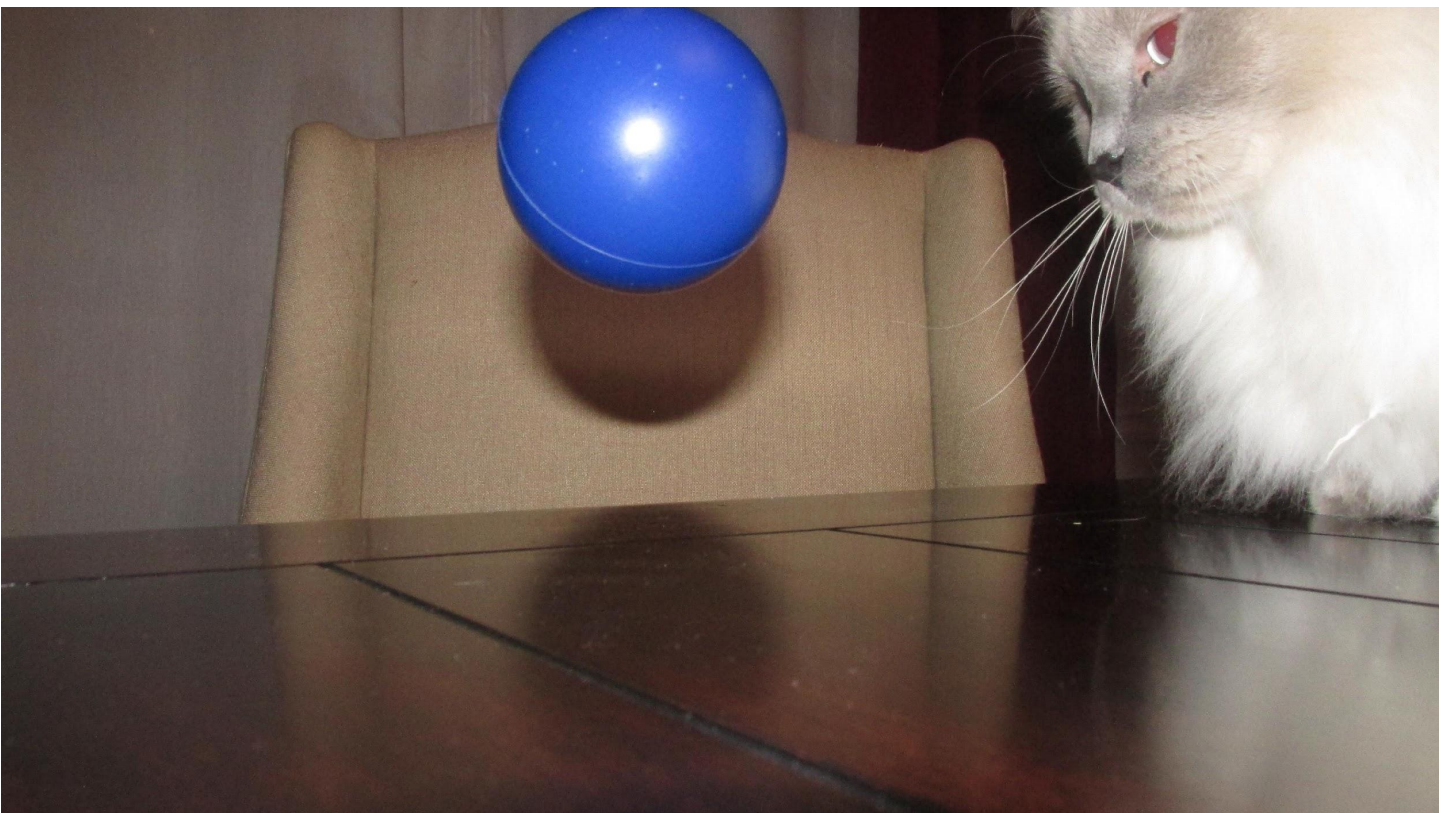
1/1000 f5.0 ISO 400



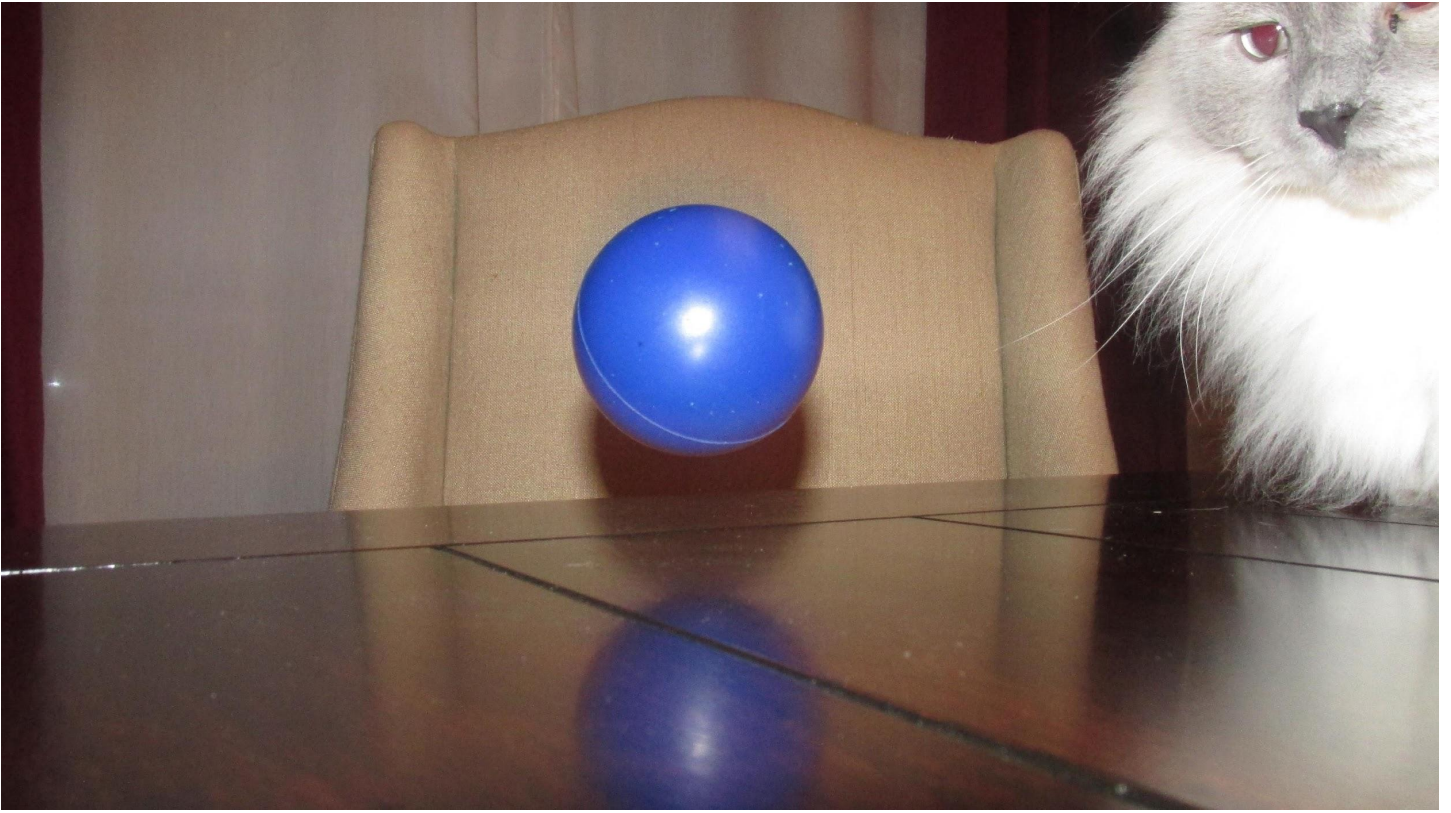
1/250 f5.0 ISO 400



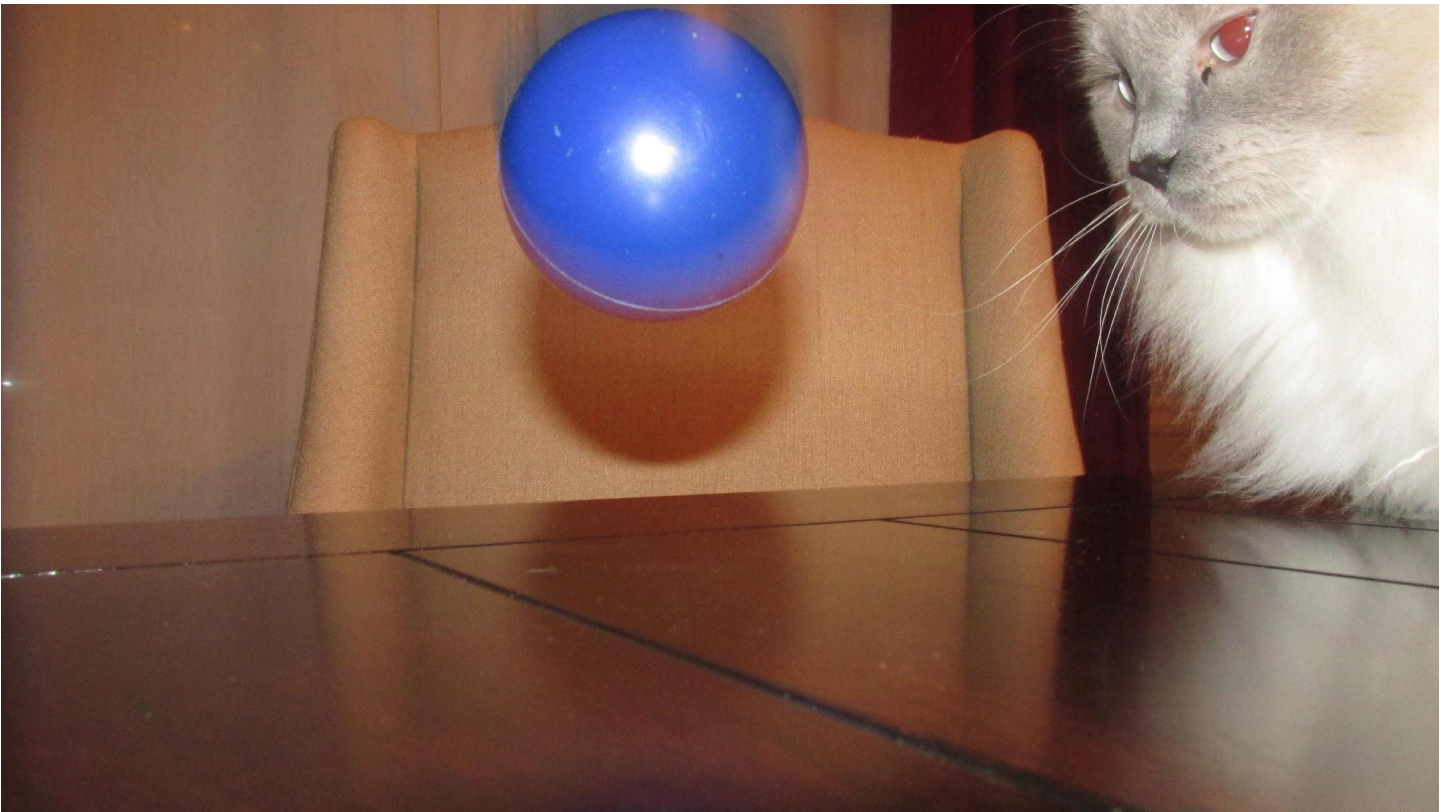
1/125 f5.0 ISO 400



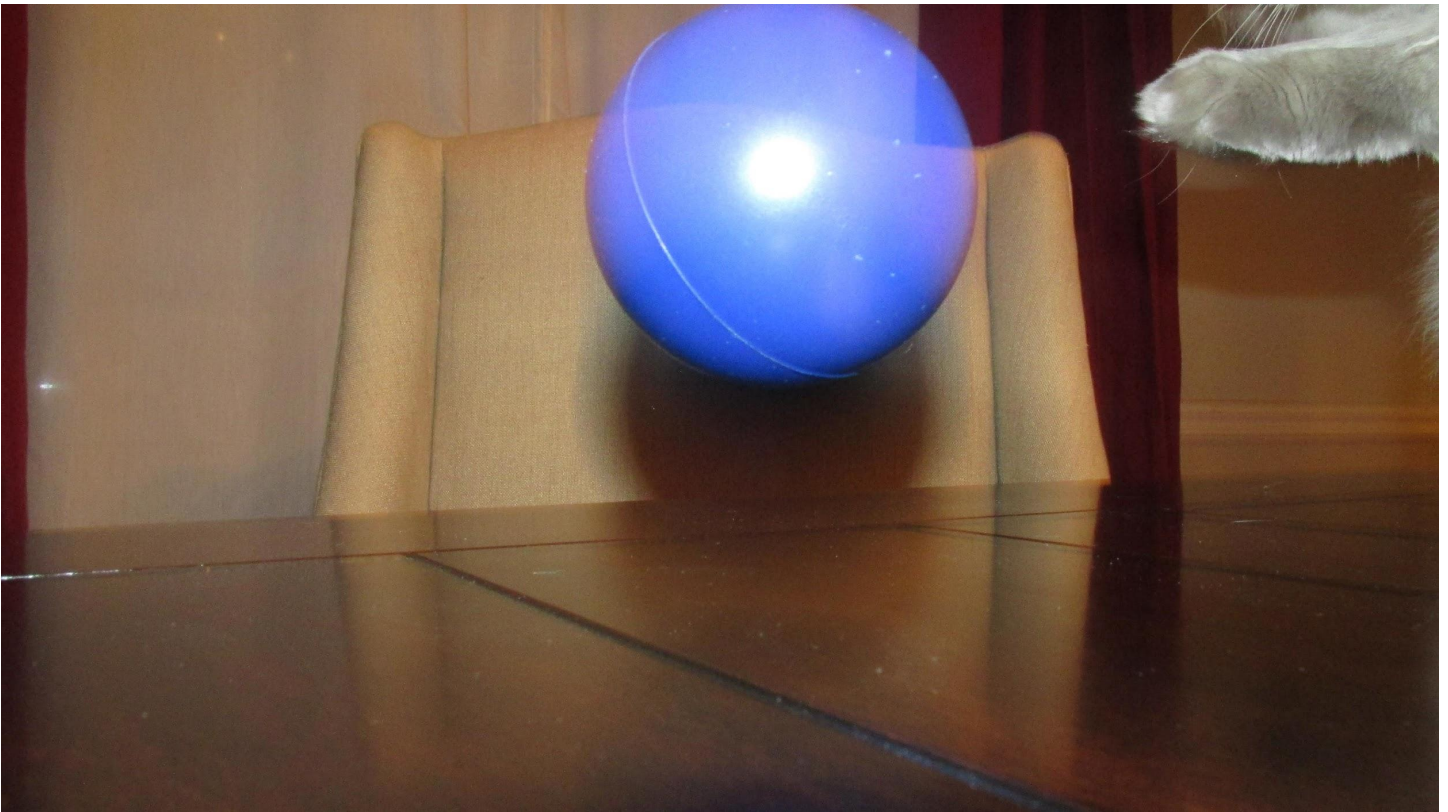
1/125 f5.0 ISO 400



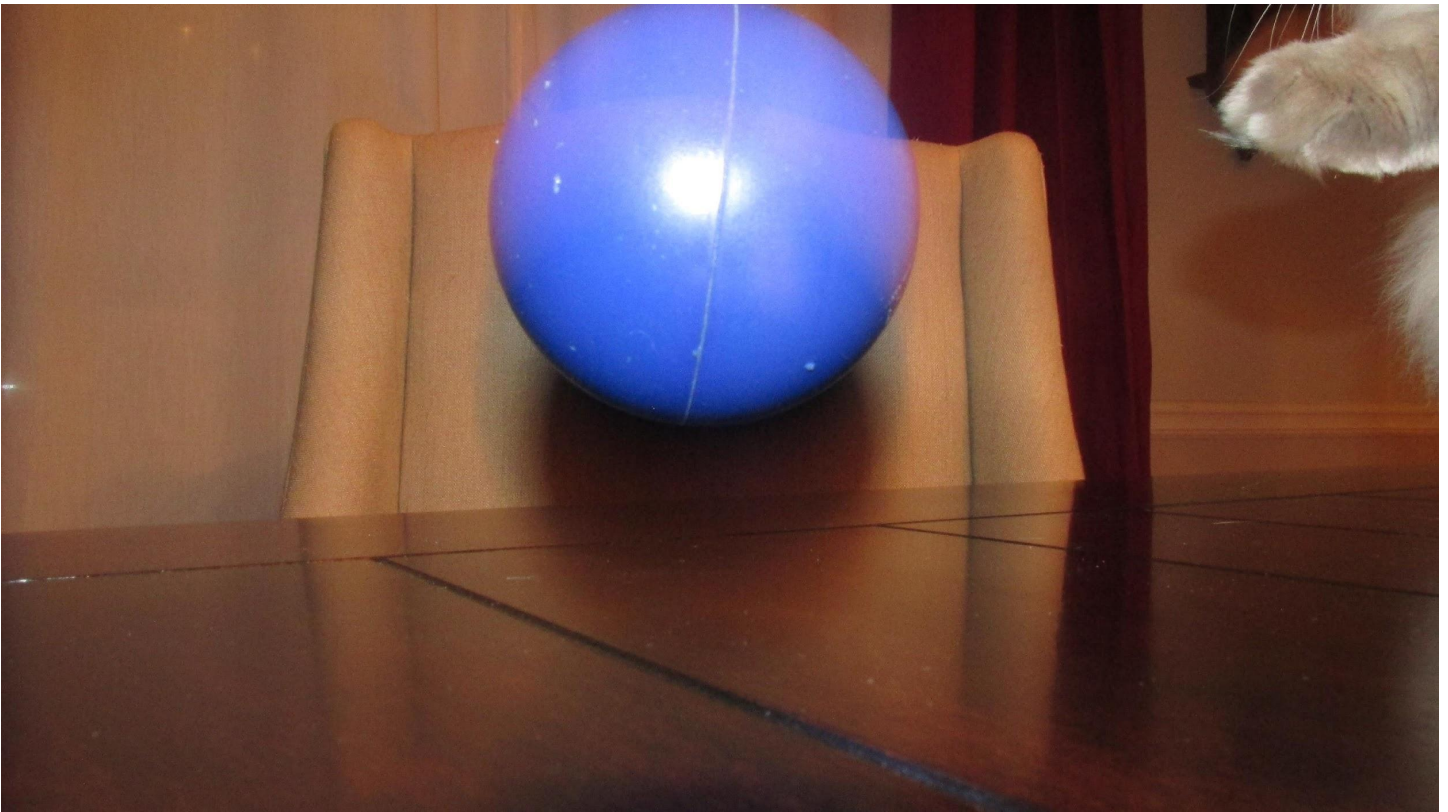
1/60 f5.0 ISO 400



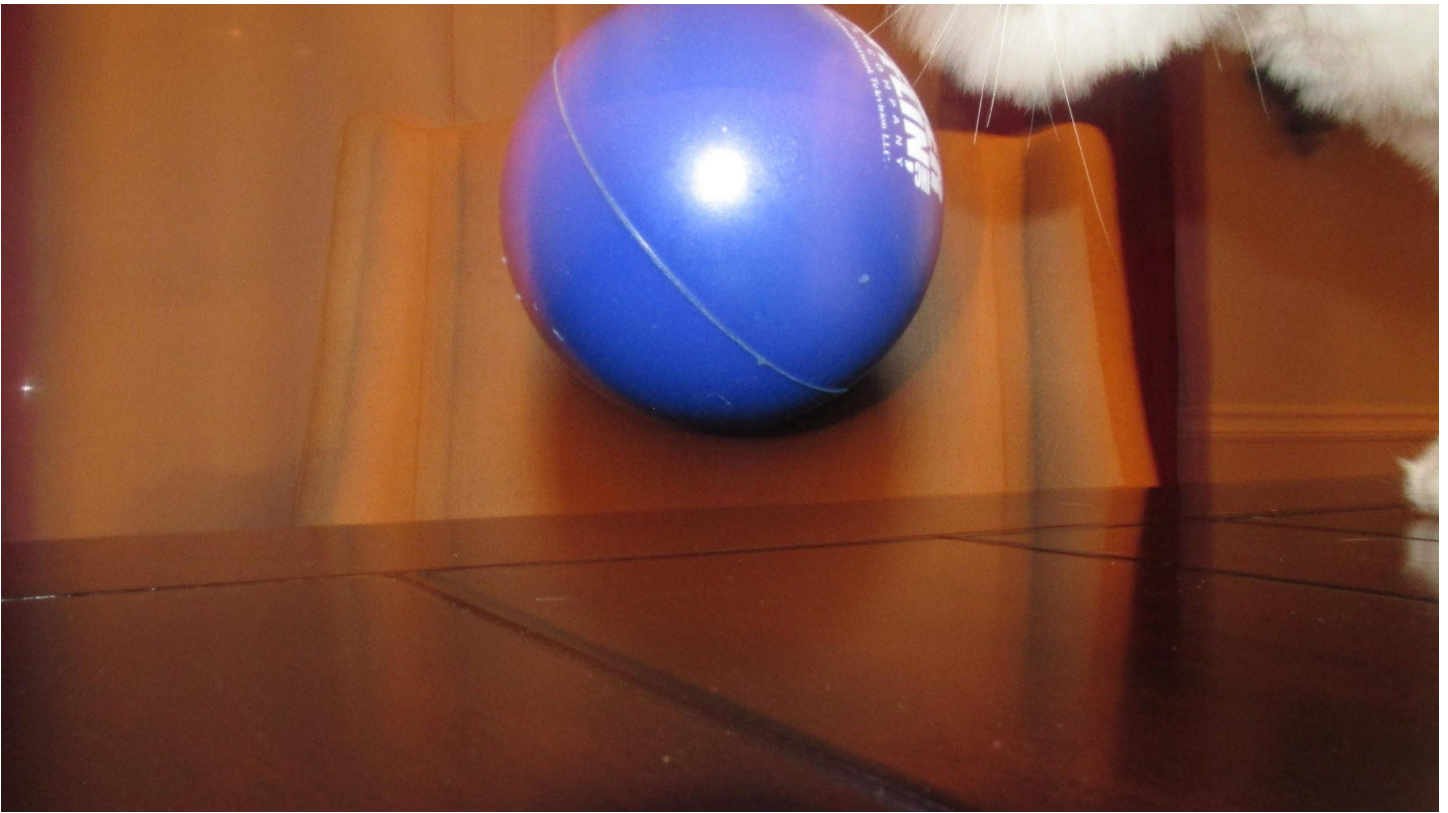
1/30 f5.0 ISO 400



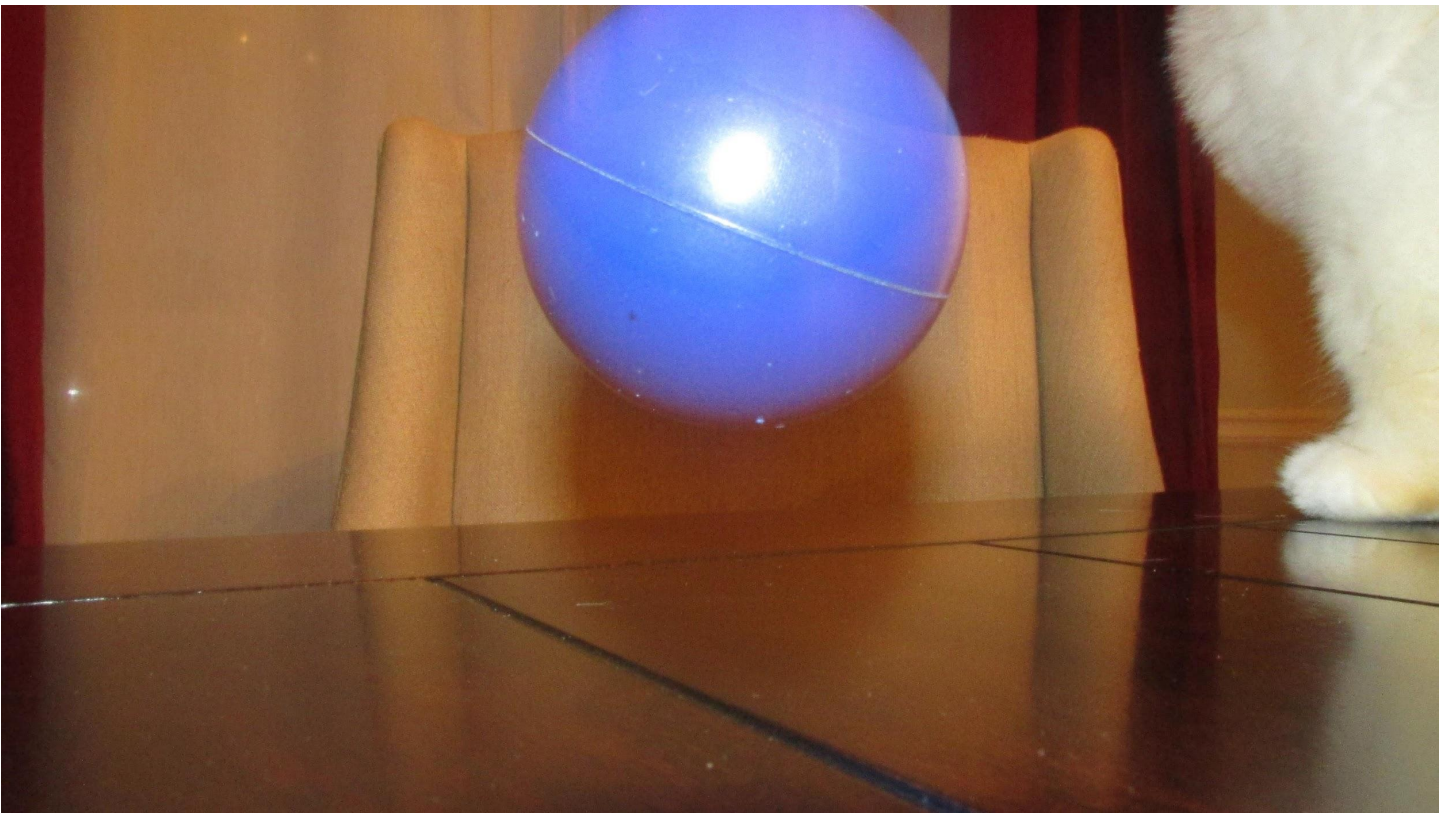
1/15 f6.3 ISO 400



1/15 f6.3 ISO 400

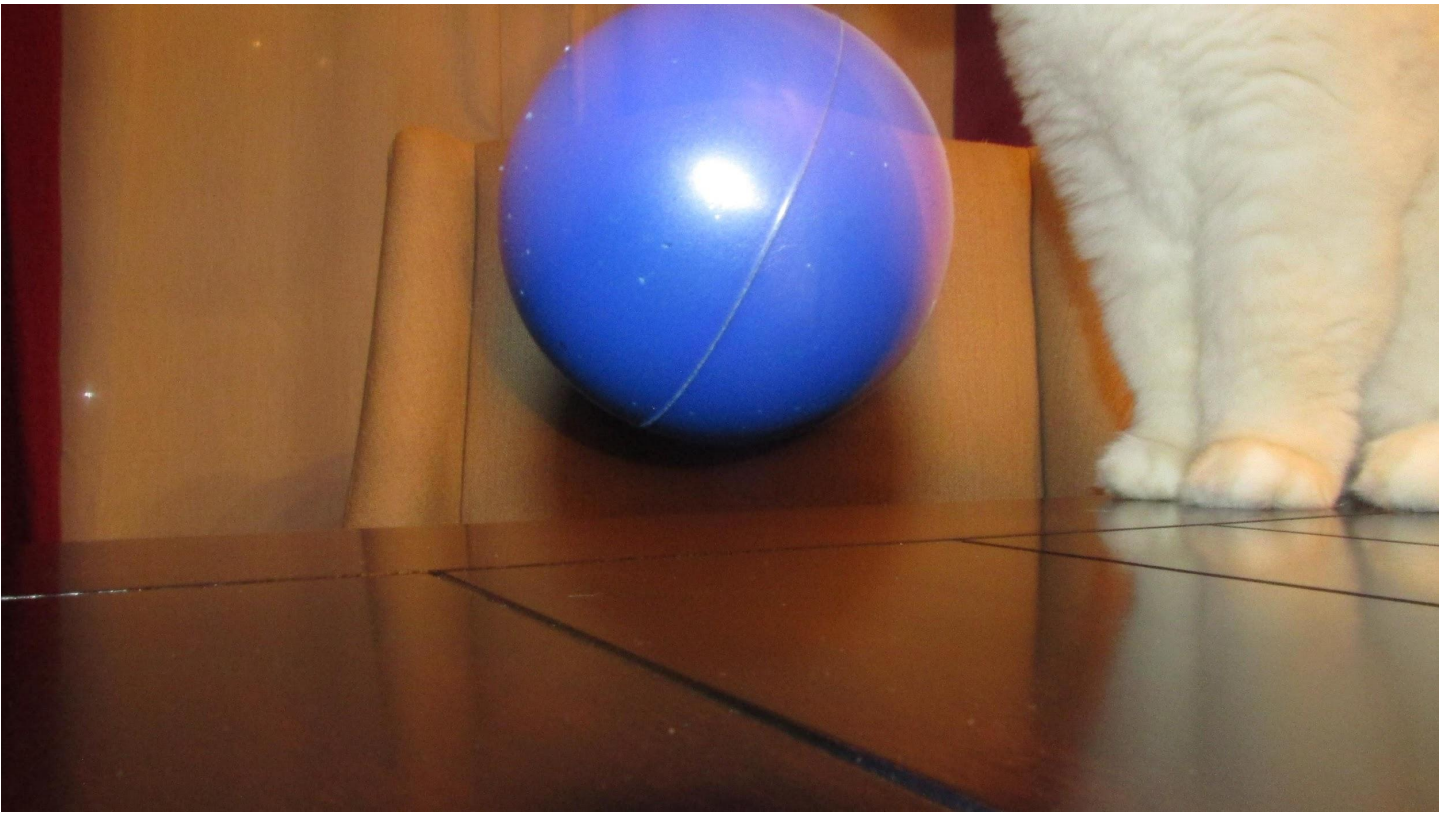


1/8 f8.0 ISO 400

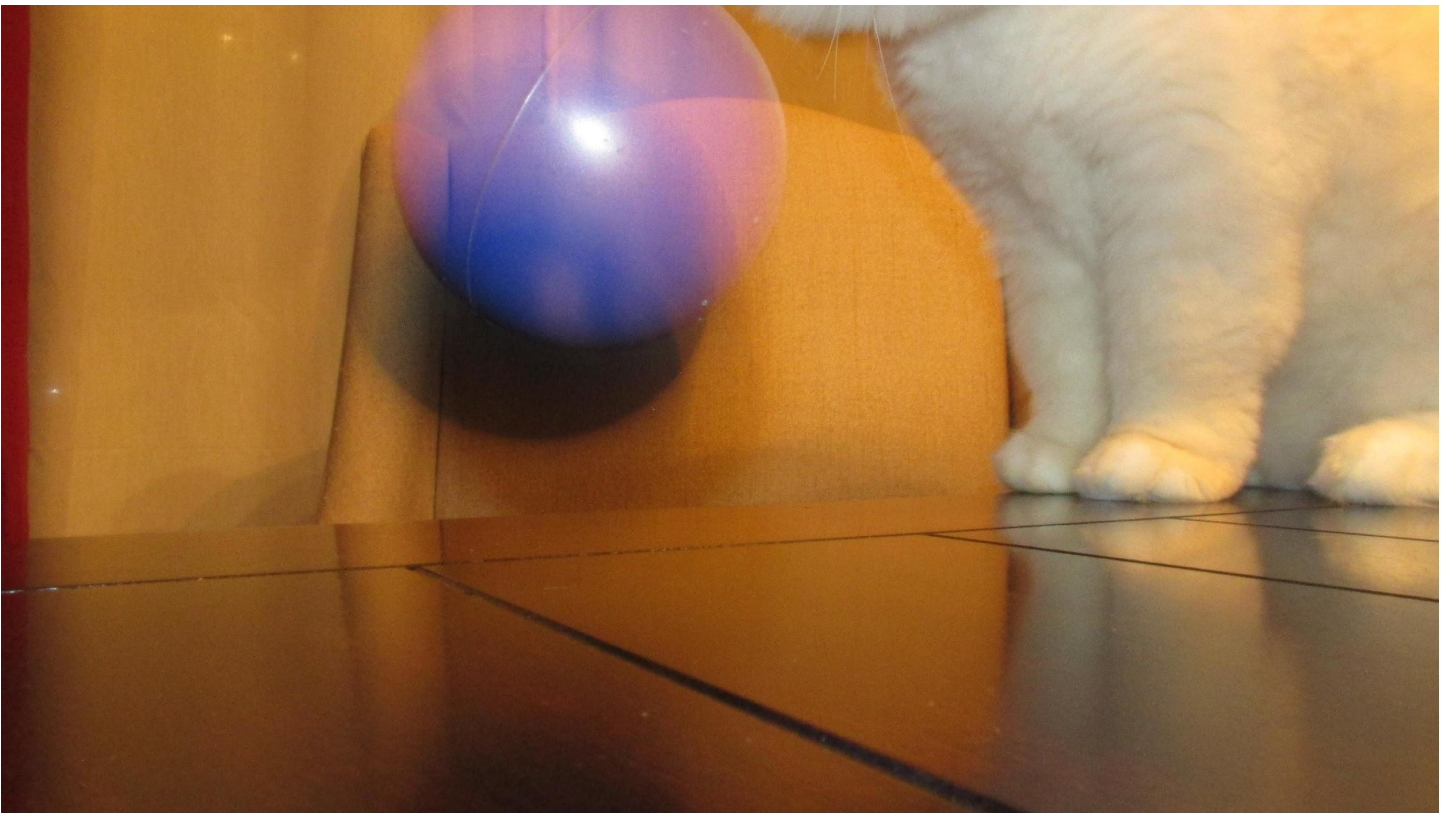


1/8 f8.0 ISO 400

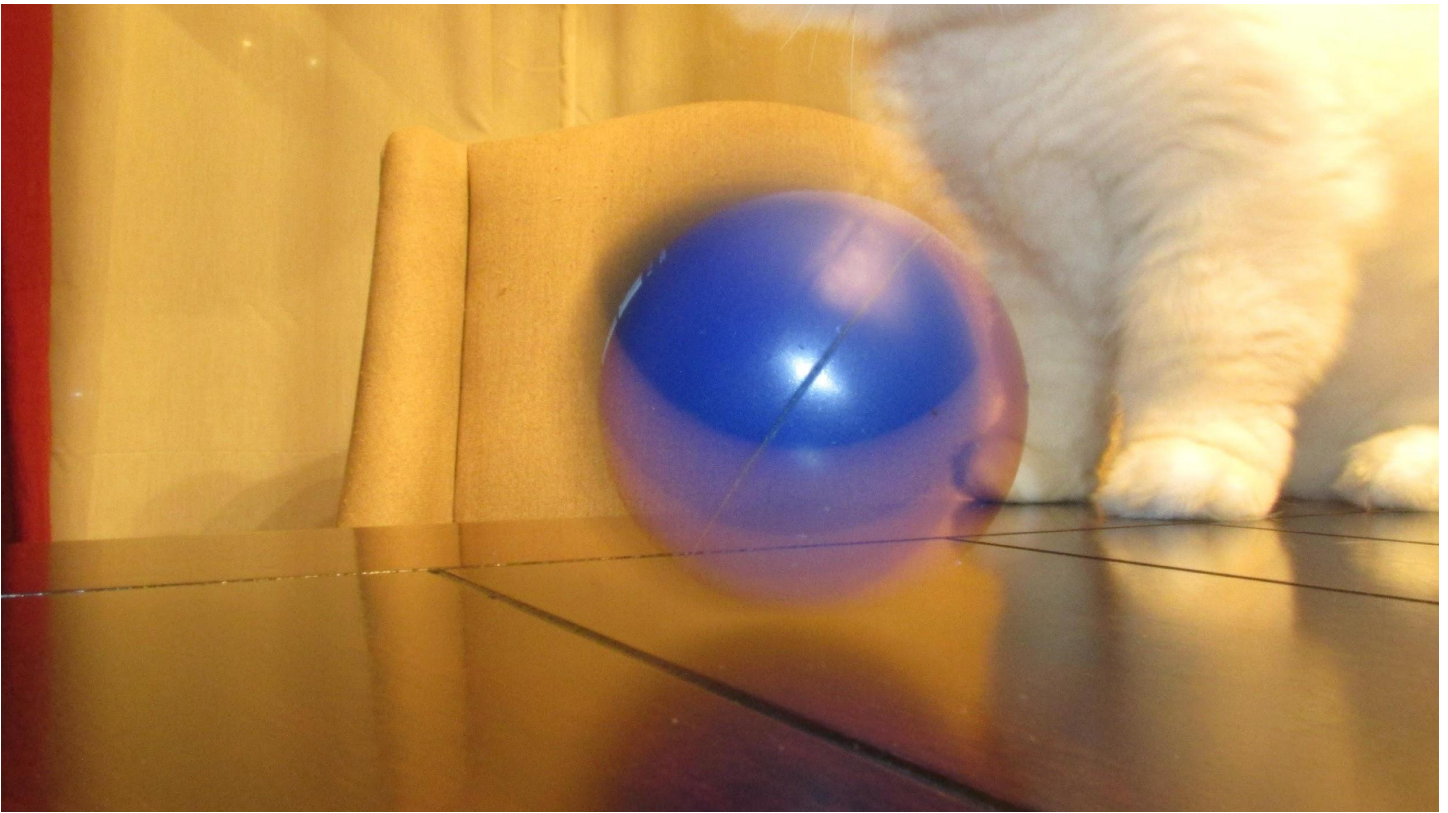




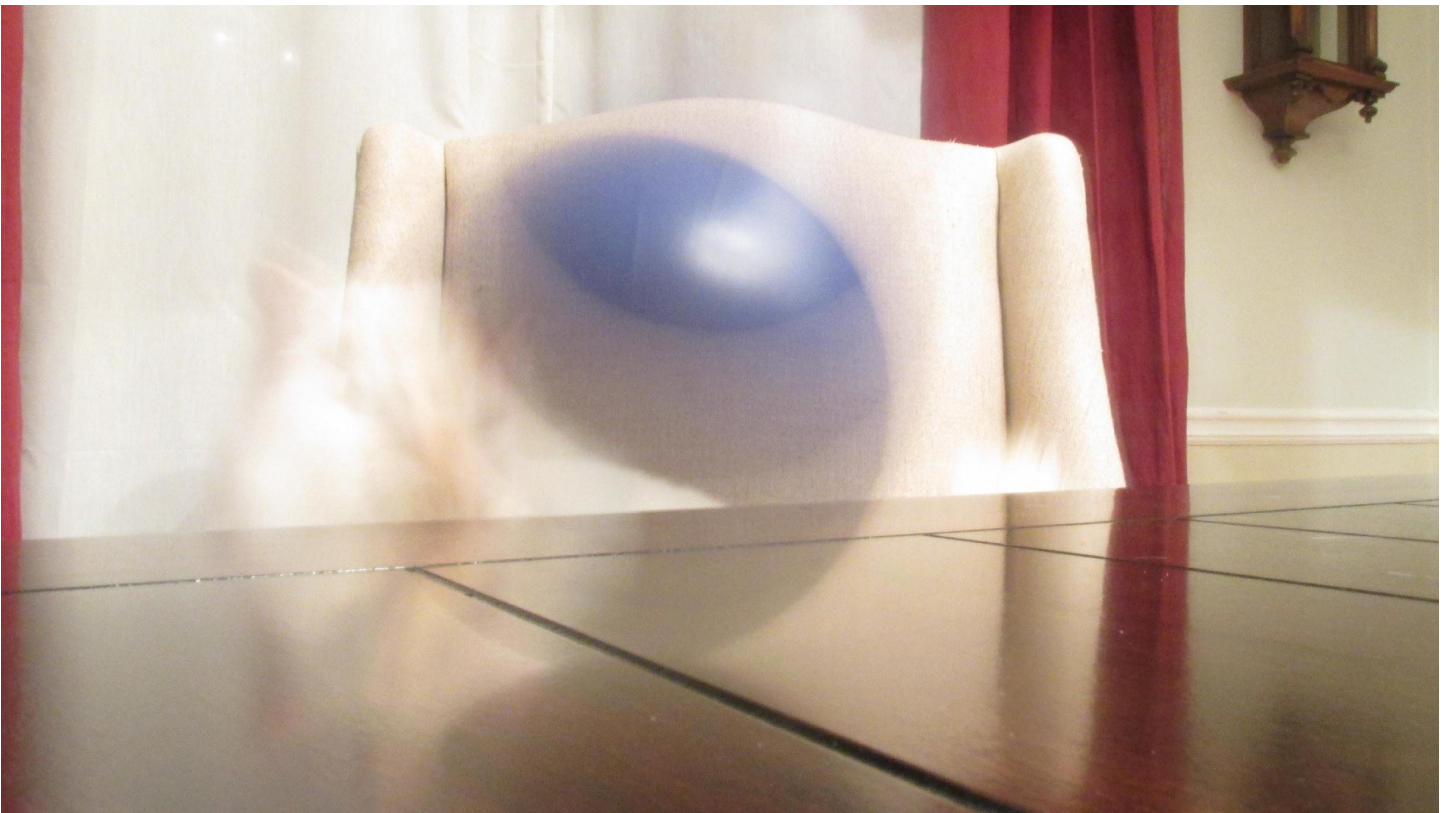
1/8 f8.0 ISO 400



1/4 f8.0 ISO 400



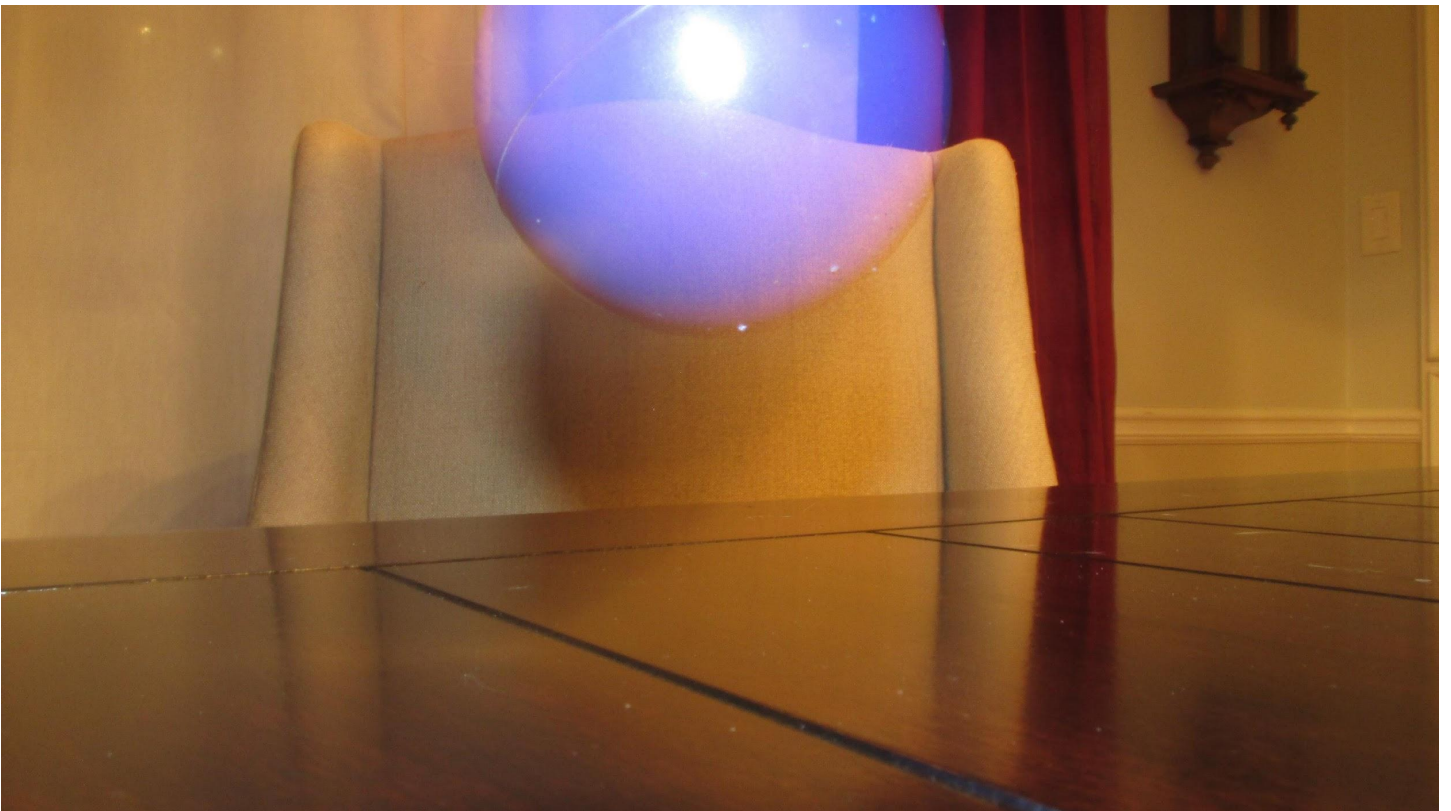
0.5" f8.0 ISO 400



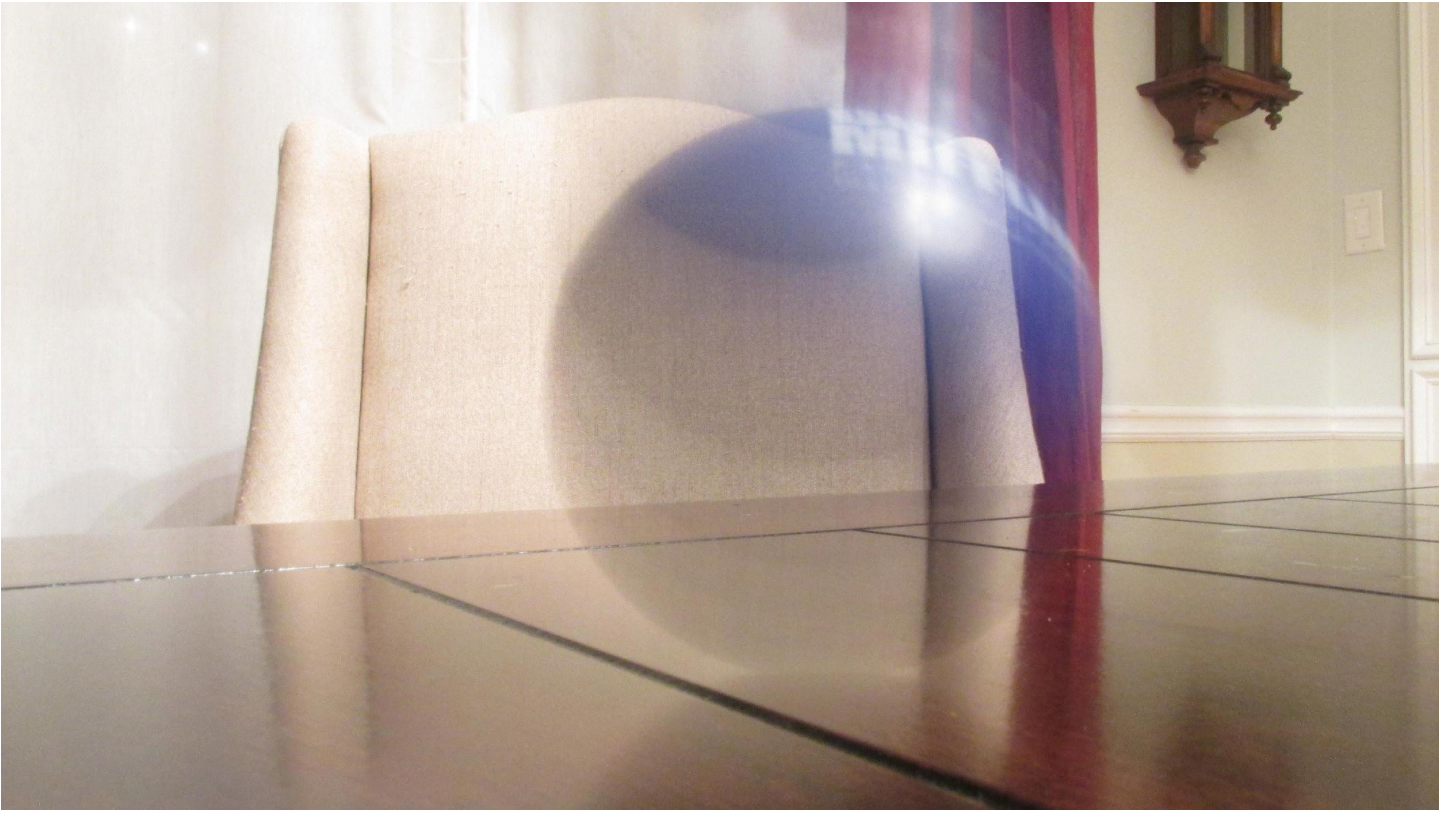
1" f8.0 ISO 400



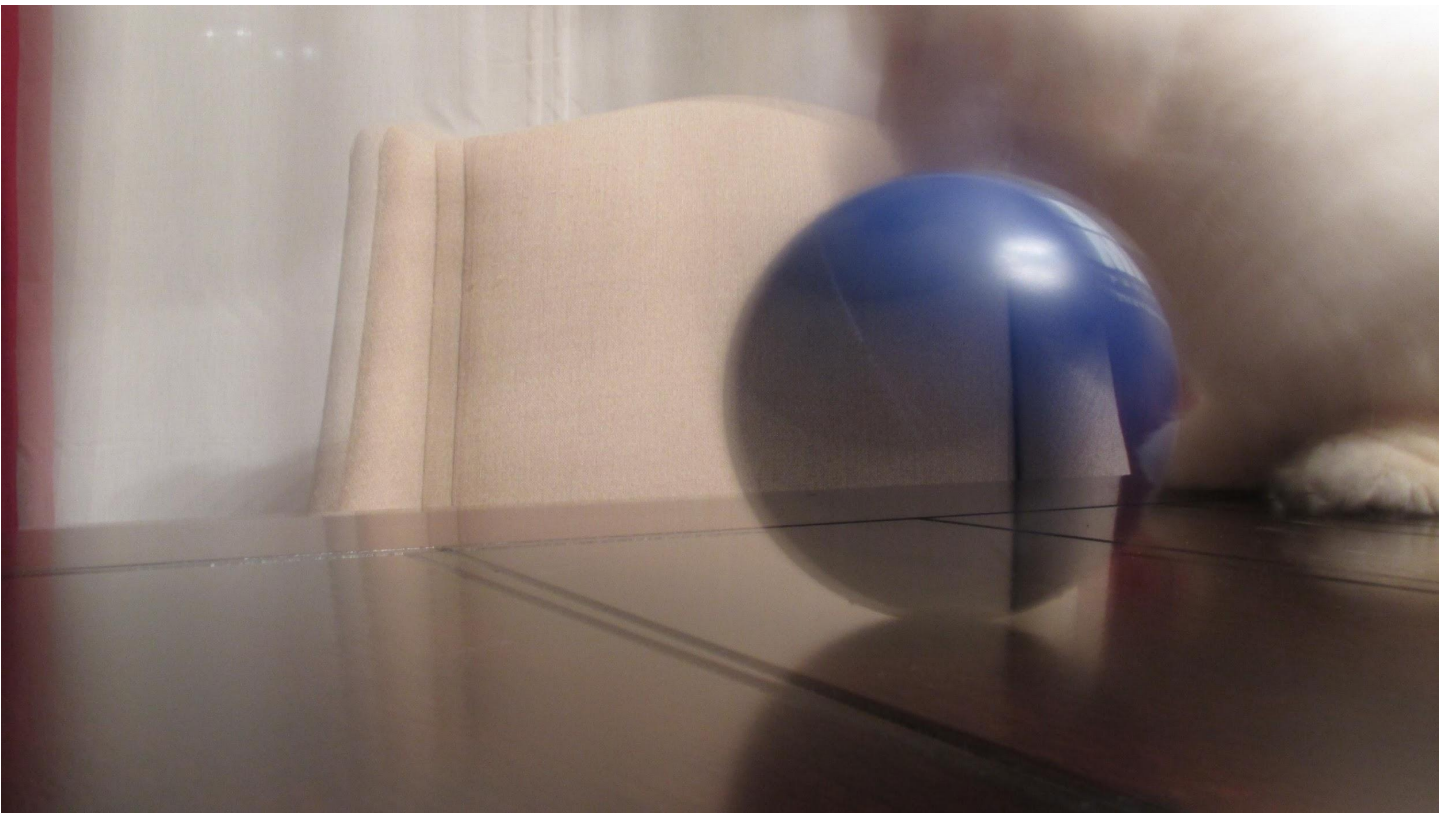
1" f8.0 ISO 400



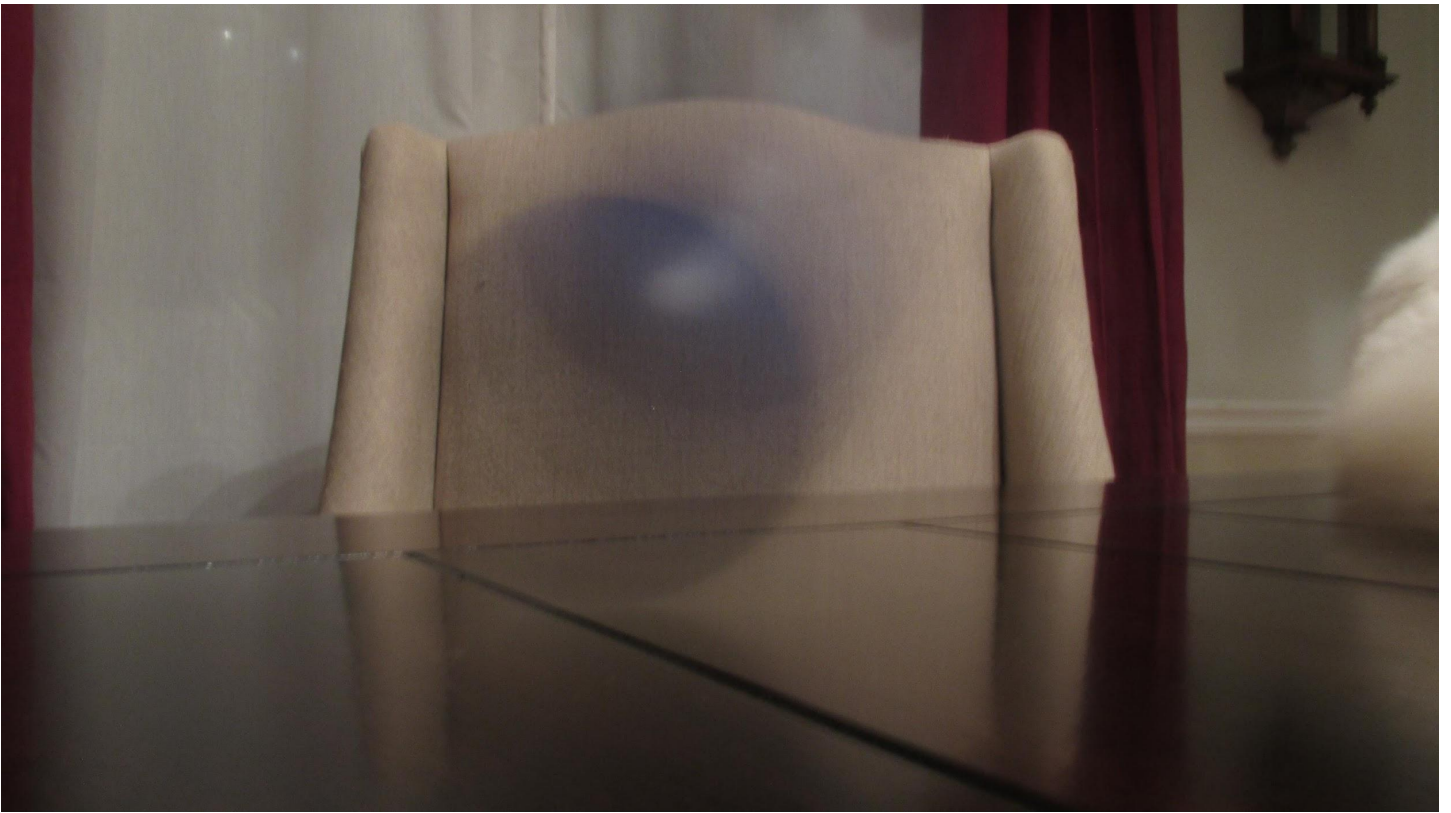
1" f8.0 ISO 100



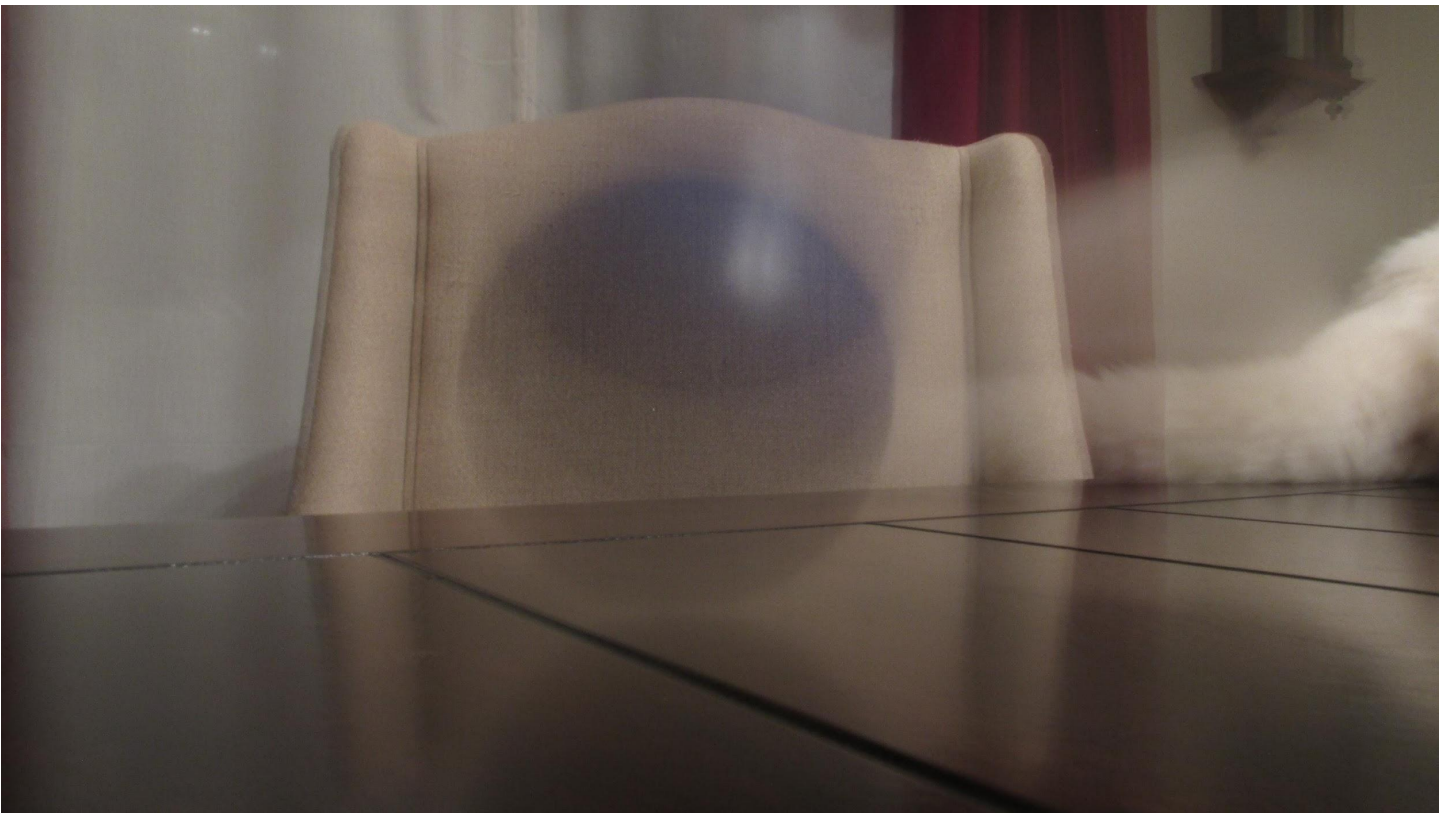
1" f8.0 ISO 400



2" f8.0 ISO 100



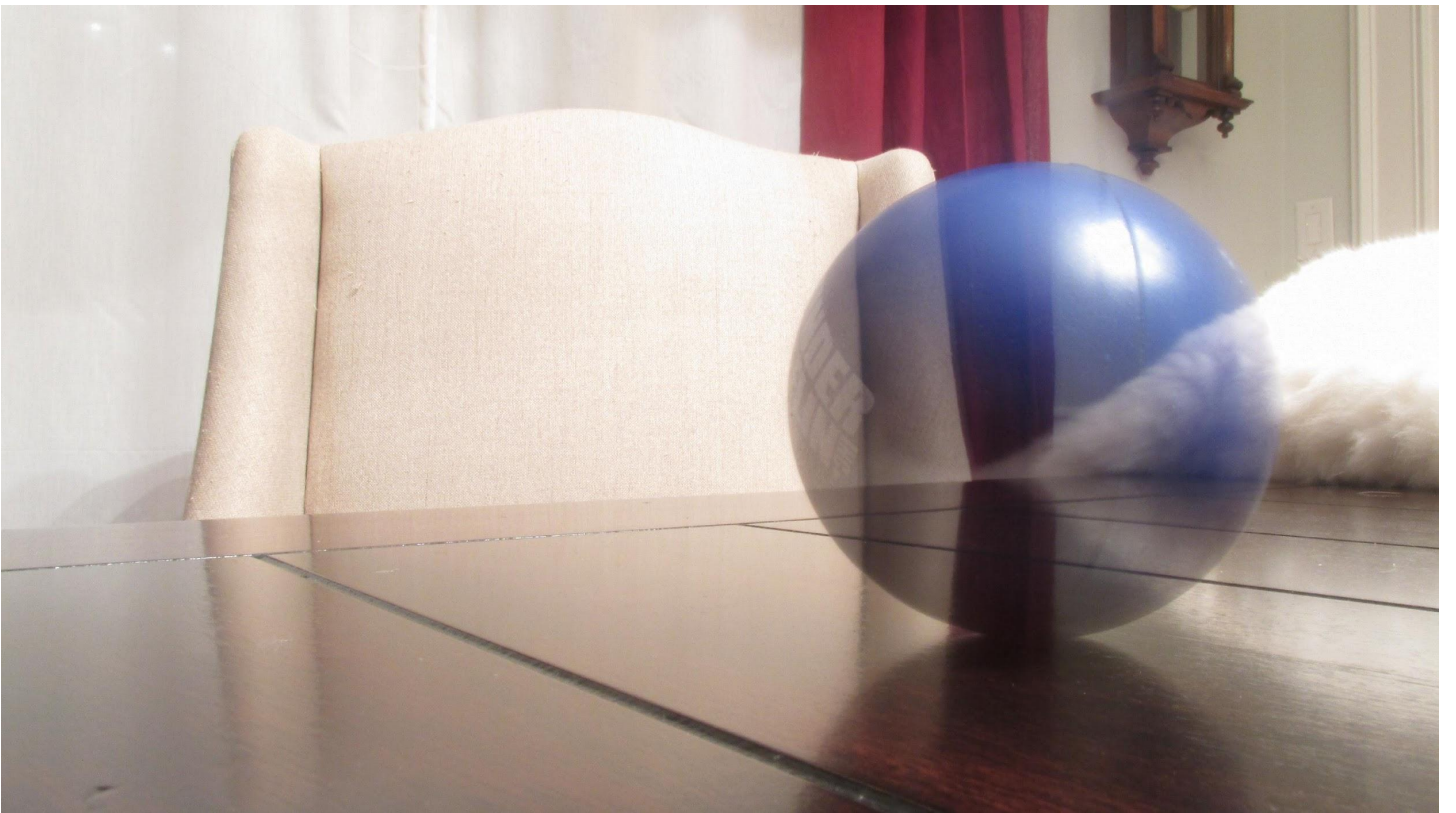
1" f8.0 ISO 100



1" f8.0 ISO 100



4" f8.0 ISO 100



4" f8.0 ISO 100



4" f8.0 ISO 100

