**Lab 6 – Video Analysis Tutorial**

1. **Open Video:**
   a. Click "insert" on the tool bar select "movie…" and find the desired file

2. **Prepare for video analysis:**
   a. Click [icon] This will **open the video analysis task bar**.
   b. Press [icon] to **set the scale**: Click and drag the length of the scale/known length. Once you release, a dialog box will open, enter the measurement value and units. Click OK.
   c. Click on [icon] Click where you'd like to **place the origin** of your axis
       i. If misplaced, just drag and drop at the desired location
       ii. If you need to change the orientation/angle of the axis, click and drag the yellow circle on the x-axis
       iii. Use this button whenever you'd like to reposition your axis
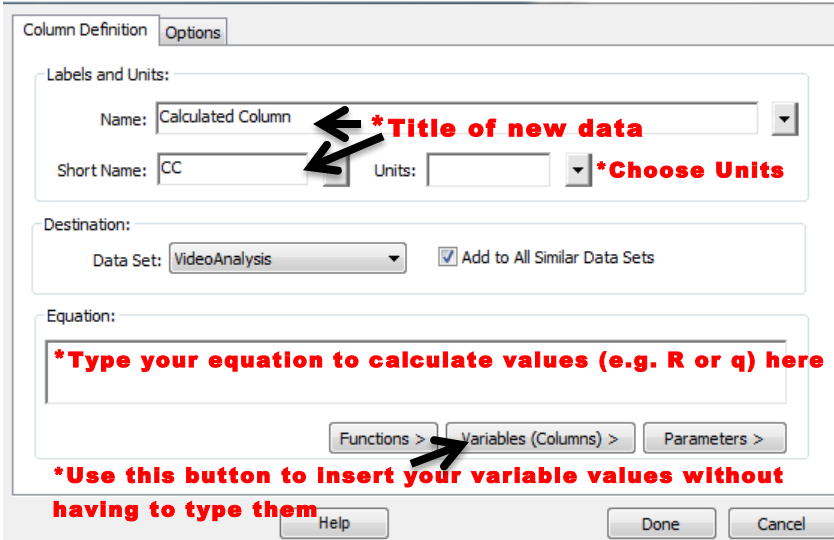
3. **Collect data points for the 1st ball:**
   a. Advance 1 frame (so that the "introductory data" is not obscuring your view)
   b. Click [icon] to **collect data points**
   c. Click on the center of the ball (exact same location)
   d. With each click the video will advance one frame, click the point's new position each time until the video is finished or a large enough data set is collected

4. **Collect data points for the 2nd ball:**
   a. Click [icon] on the video analysis task bar
   b. Click "Add Point Series" to **create a new video analysis data set**
   c. Repeat data collection procedure outlined above (3) but for the 2nd ball (click its center each time)

5. **To add a new column (i.e. for charge):**
   a. Click on "data" on the tool bar
   b. Click "New Calculated Column, A dialog box will appear:

     c.   Click "Done" to calculate the desired values and make new column for them on the data table

6. **To add a new graph**:
    a. Click Insert -> Graph
    b. A graph will appear
    c. **To change axis data**: left click on the desired axis and select the desired data set to be shown, from the drop down menu
    d. **To change axis number value range**: left click on the number value at the end of the axis which you would like to change (e.g. "0" on the x-axis if you want to change the start of the graph to another value) the number will change into a text box, type in you desired start or start number.