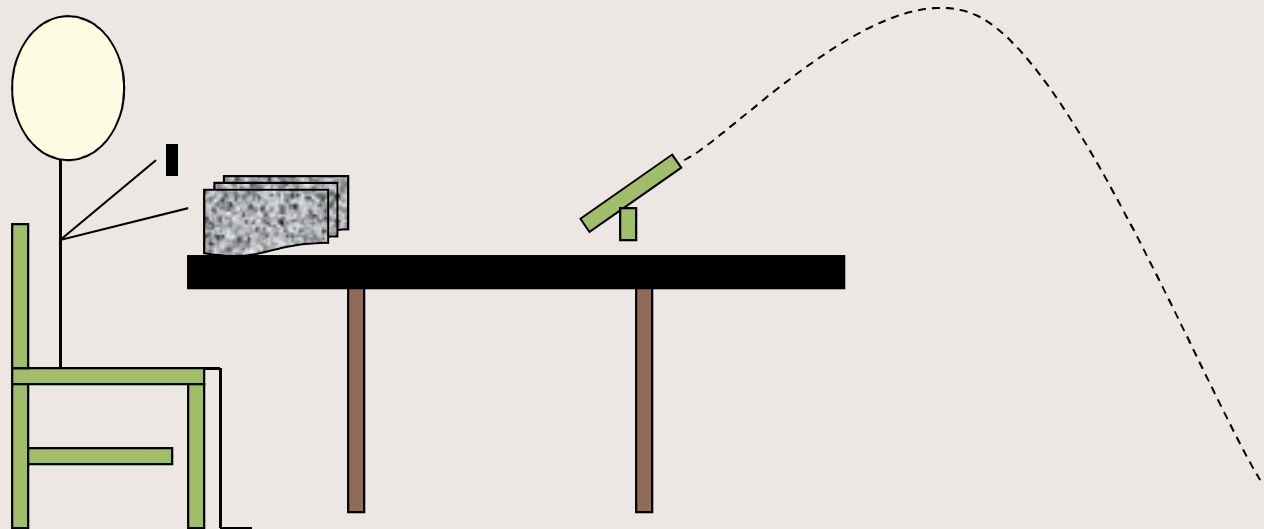
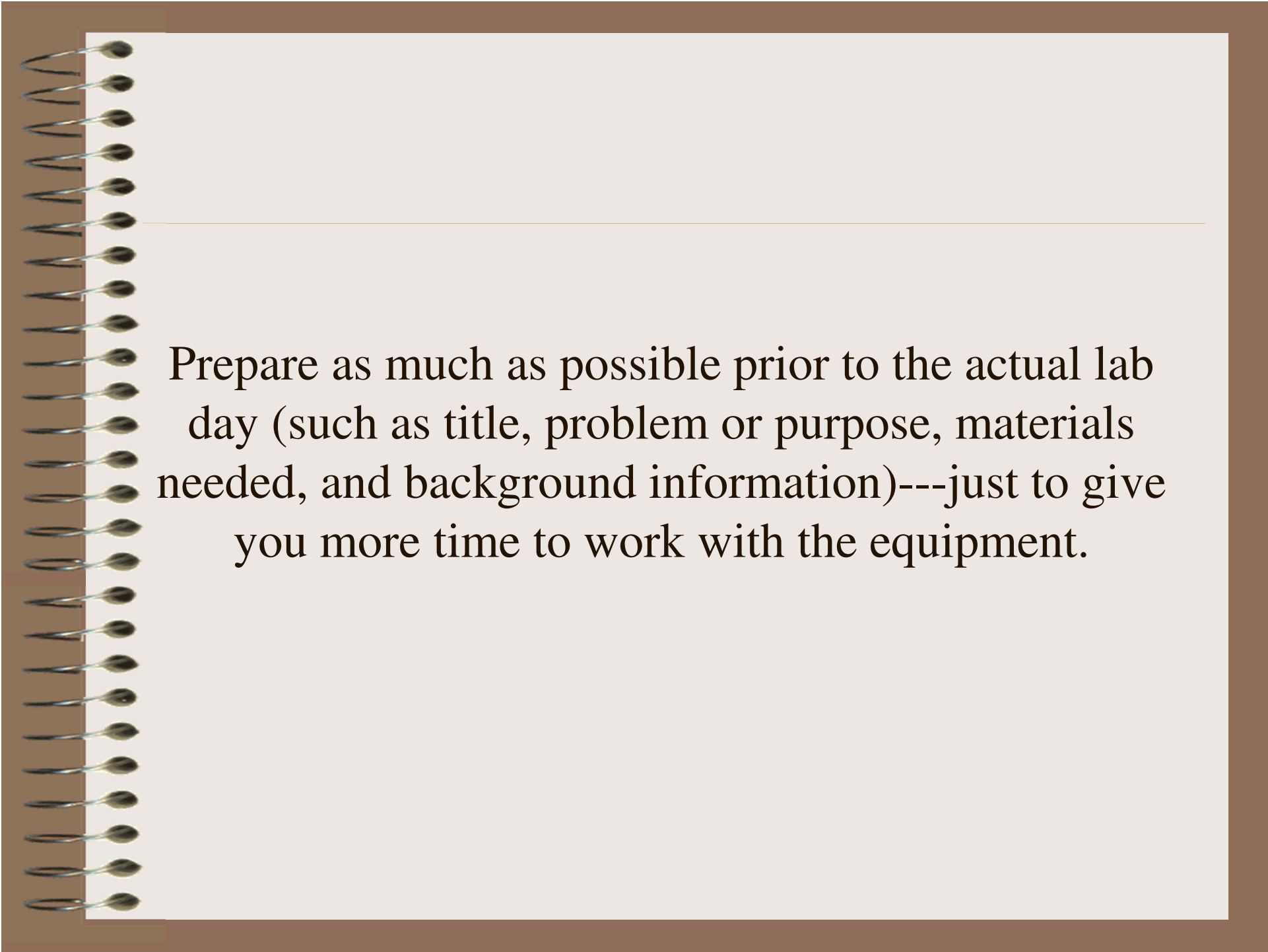


# The Laboratory Journal

All lab reporting must be done directly in the lab journal as the lab is being conducted.



A graphic of a spiral-bound notebook with a brown cover and a white page. The spiral binding is on the left side. The text is centered on the page.

Prepare as much as possible prior to the actual lab day (such as title, problem or purpose, materials needed, and background information)---just to give you more time to work with the equipment.

October 12, 2010


Jamie Smith

Partners: Ryan Reynolds

Blake Lively

~~In the upper corner of the first page~~

In the upper corner of the first page of each lab, write your name, the date, and names of lab partner(s). You may use the front and back of each page. Do not tear any pages out of the book or use it for anything besides lab work. If you want to delete something, simply cross it out.



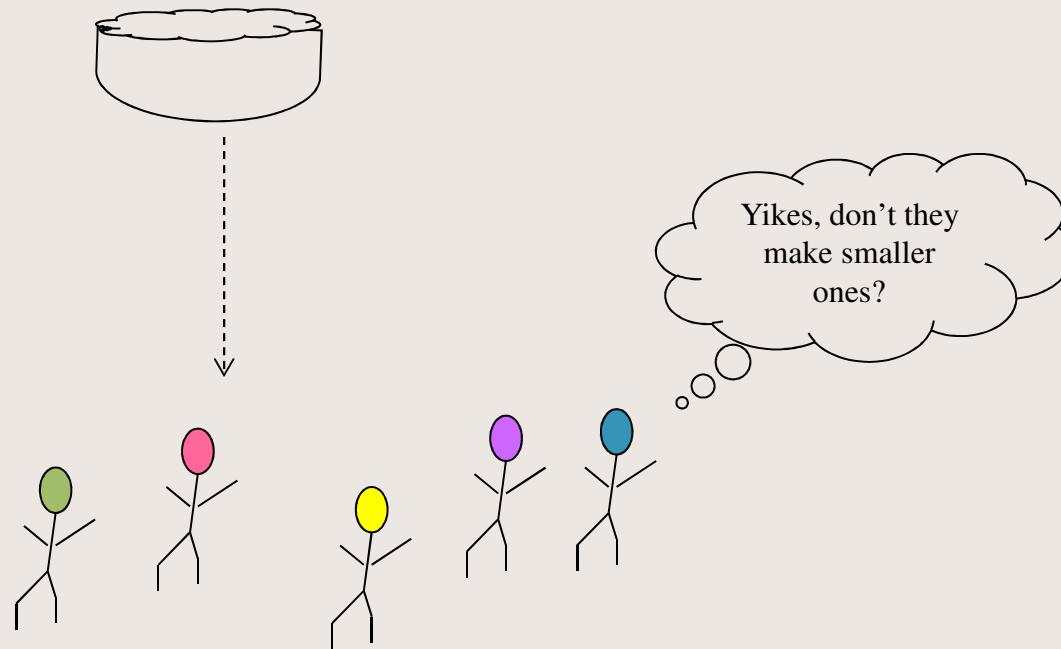
**Give your lab a title.** (Creativity is appreciated, but a subtitle should be more descriptive of the procedure.)

Example: “Shooting Hoops”  
(Projectile Motion to a Raised Target)

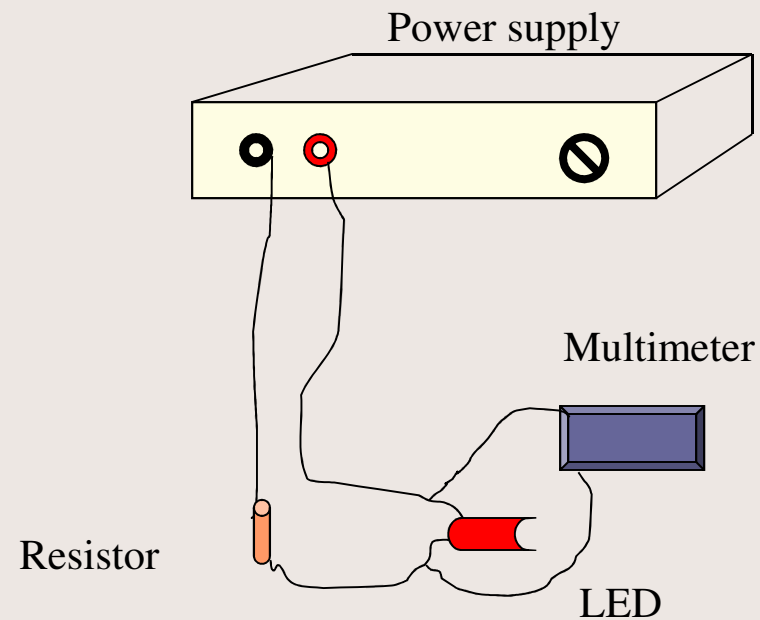
## State the problem or purpose of the lab.

Example:

Purpose: To determine the air drag coefficient for a falling coffee filter.

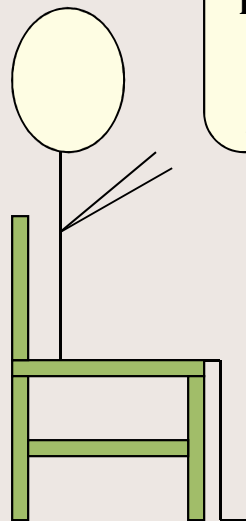
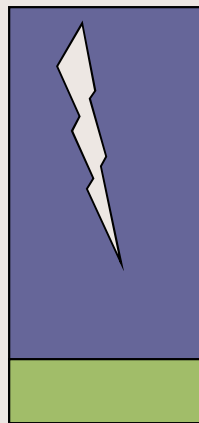
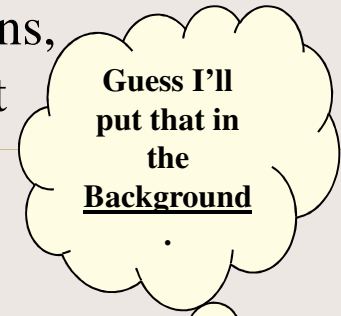


List the **materials** needed and provide a brief description or diagram of the **set-up**.

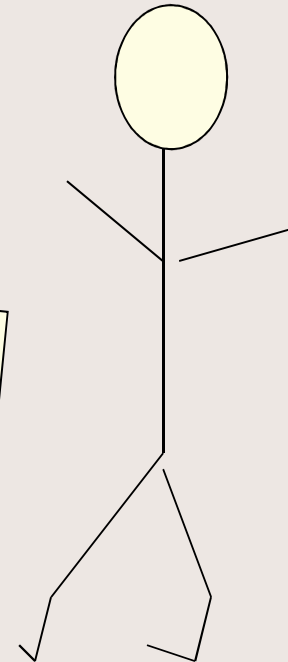
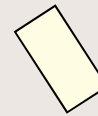
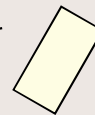
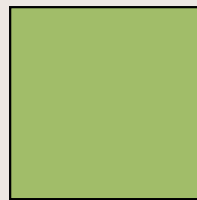


A labeled diagram is the quickest and easiest way to do this.

Provide a **background** with necessary equations, derivations of equations, safety comments, notes about procedure that will reduce uncertainty, and assumptions....anything that is important is preparing, setting up, and processing data.



**Note: Let's not forget to close the door to prevent drafts when we use the air track.**



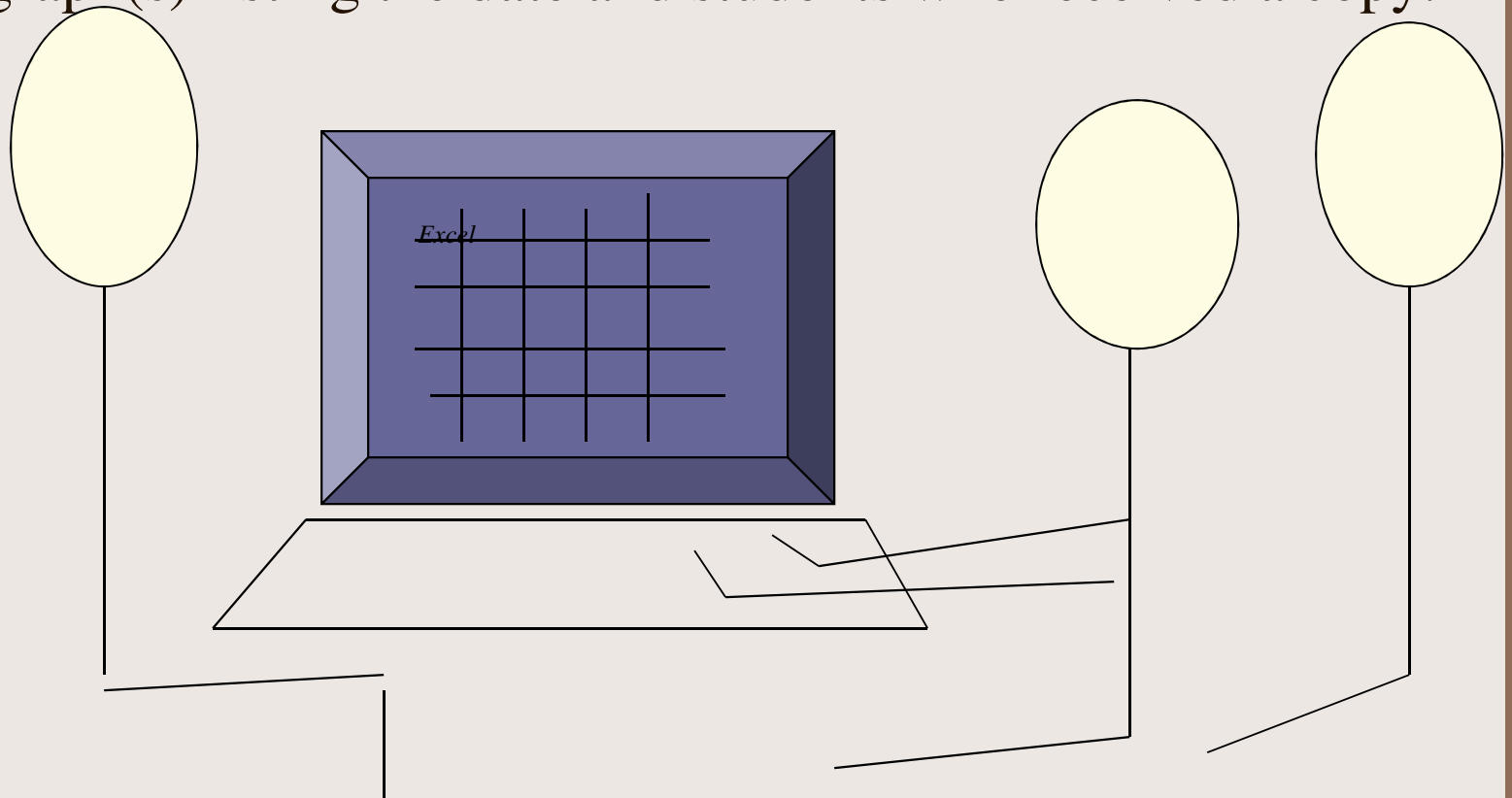
Gather data in a **data table**. Label the headings with units. Construct graphs whenever feasible, making them half-page or full-page so that values can be determined with accuracy. Also include any other observations that may be important in developing the analysis later.

Example:

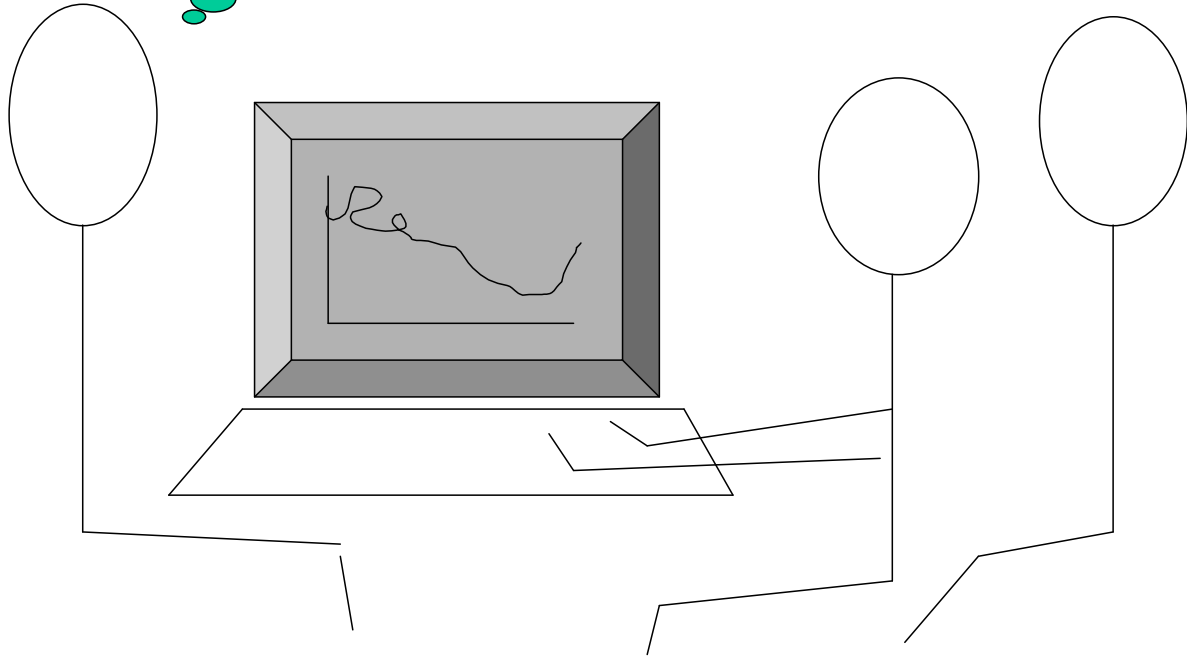
	Time, $t$ (s)	Distance, $d$ (m)
Trial 1		
Trial 2		
Trial 3		



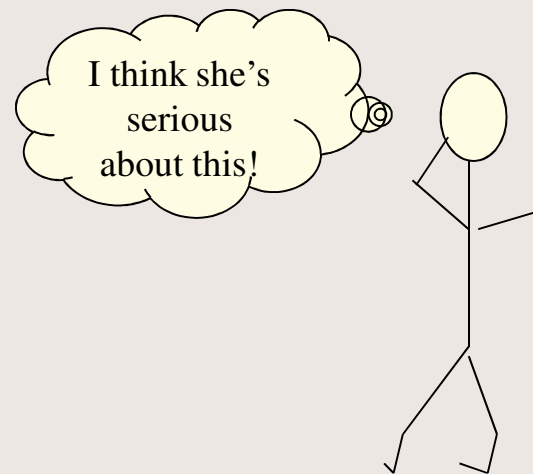
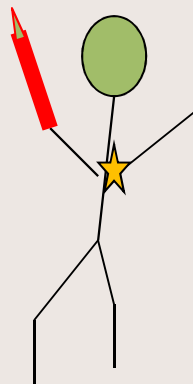
A working group with the same lab data may work together to produce and print graphs. However, only those who are actually there as the graph is being created may receive a printout. Additionally, a “header” must be printed with the graph(s) listing the date and students who received a copy.



**It's  
definitely  
linear.**



The **analysis** is an extremely important part of your lab journal report. This is where you display your understanding of the experiment. Even though the other parts of the lab report may be similar—practically identical—to the others in your group, you must write your analysis alone. It should be your own, unique work, applying the same plagiarism rules you might use on an English or history paper.



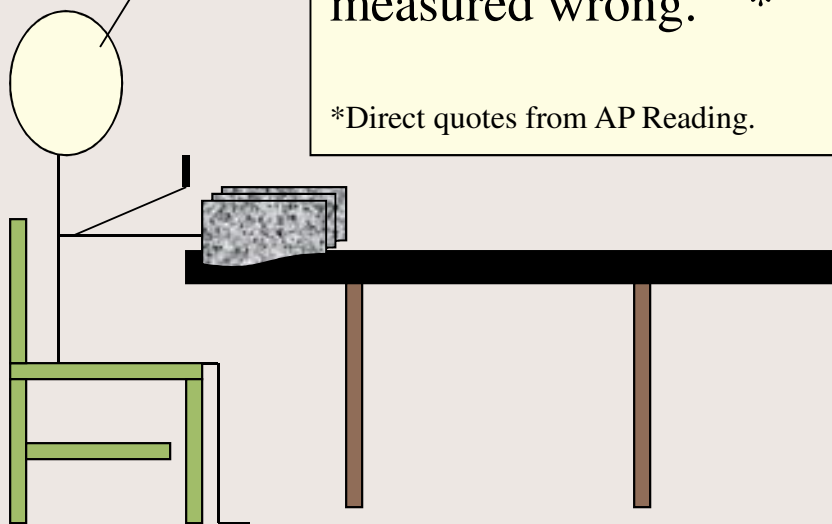
## Essential features of a good analysis:

- Complete sentences in paragraph form.
- No question/answer format. Answer the recommended questions in your paragraphs...as if they are part of your thinking.
- Discuss uncertainties in measurements and sources of uncertainty in general in the experiment.
- Use your graph(s) to write comments, such as meaning of slope, intercepts, area, etc.
- Include summary of what you learned from the lab and what might have been improved with a better method or approach.

NOT

Analysis: “The largest source of error in this lab was human error.” “My lab partner might have measured wrong.” \*

\*Direct quotes from AP Reading.



(Let's hope this one is yours.)

Excellent

A+

Mrs. W.