AP Physics 1 Lab Handout 02 "Displacement on the Velocity – Time Graph"

Your Name:
Lab Partner(s):

Purpose: To verify that displacement equals the area under the curve on a velocity – time graph.

Materials:

2 meters of string	Lab Pro interface	AC adapter
Laptop w/Logger Pro	linear motion track	large C clamp
rotary motion probe	mass hanger	dynamics cart
2 small C clamps	4 popsicle sticks	

Procedure:
1.

This section tells the reader *exactly* what you did during the experiment. It should be detailed enough that any scientist could read this section and do exactly what you did during the experiment. Do not make the reader have to guess what you did.

Results:

Observations:

Data:

x_i	x_f	Δx	Integral	% difference

Diagram:

Error Analysis:

Surely something may have gone wrong during the experiment that may or may not have been preventable. This is the section where you mention all of these factors.

Think about: Personal error, equipment failure, poor directions, carelessness, calculation errors… There are many sources for error and it is very important that you convey this to the reader of your report so that he/she can try to prevent these errors in the future.

Conclusion:

This is the part of the lab report where you reflect on what you did in the experiment and what you have learned. If the lab/experiment relates to something that we did in class, then make sure to talk about how it may (or may not) be relevant to what we have learned.

- What basic principles in physics did this lab demonstrate?
- What did you learn?
- How could it have been made better?