Kinematics Lab Report: Physics
**Questions to address specifically in your report*

Abstract -
- Explain the purpose of the lab in two sentences.

Theory/Introduction –
- Explain new variables and how they are related to each other (distance, displacement, velocity, acceleration…). Consider using definitions and formulas.
- What might be the benefit of using a graphical representation of an object's motion?

Procedure –
- Explain the materials and processes used to collect data. Please be detailed, but concise.
    - What data was taken during part I?
    - What data was taken during part II?
    - What data was taken in part III? Also, how was this set-up different?

Data –
- Data is included in the lab itself. Make sure all graphs are labeled and all lab questions are answered.

Error Analysis -
- Based on the notes taken during the lab, what were factors that could have contributed to incorrect data or incorrect graphs?
- How might some of these errors be eliminated or reduced?
- What might you change if you were to do the experiment again?

Analysis –
For each Part, please consider:
- For parts 1 and 2, how did a fast run look different than a slow? What did the graphs look like?
- For part 3, what variable was present during this trial that was not present before?
    - How did this variable change the position graph compared to part 1?
    - How did this variable change the velocity graph compared to part II?

Conclusion
- What do we gain by looking at the graphical representation of motion?
- What do the shapes and slopes of the lines tell us?

Works Cited (include if any outside sources were used)