

Pendulum Lab Report Checklist

- Sketch of Experimental Setup (photocopy it from your notebook)
--your sketch should include data from Trial 1 as explained in class.
- Data Table (may turn in your handwritten copy unless it is not legible. In that case you must type it.)
--your data should have a minimum of TWO SIG FIGS.
--your data table should include a % error column
--equation for % error is:
$$\frac{\text{experimental KE} - \text{actual KE}}{\text{actual KE}} \times 100$$
- Calculations for Data Table
--You must show your work for your calculations for Trial 1 ONLY.
--Show your work for: Δ height, PE at point A, experimental KE, actual KE, % error
--Your calculations should have only TWO SIG FIGS. Check that your data table reflects this.
- Excel table and graph
-your table should include two columns: v^2 (m^2/s^2) and PE (J)
-your table columns should have headings labeled with units as shown above.
-your graph should have a title and axes should be labeled (with units)
-display the equation on the chart (delete the y-intercept since it will be close to 0)
-modify the equation excel gave you to change y to what it really represents and to change x to what it really represents. (Hint: see what you titled your excel columns—one of them is what you plotted on the x axis and the other is what you plotted on the y axis.)
- Percent error calculation for your $1/2(\text{mass})$. You must show your work!
--% error equation:
$$\frac{\text{experimental one-half mass (your slope)} - \text{actual one-half mass (based on your scale reading)}}{\text{actual one-half mass}} \times 100$$