**Lab #7 – Work-Energy Principle Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Objective Statement: Describe the purpose of the lab in a few sentences, and state any hypothesis formed ahead of doing the experiment.

*Watch the Work-Kinetic Energy Theorem Video and complete the data analysis in your excel spreadsheet.*

Give an estimate of *δx*, with explanation.

Derive the error propagation equation for *δK* (the kinetic energy).

Does *K* match *W* within the experimental uncertainty? If not, what could account for the discrepancy?

Give an estimate of *δF*, with explanation.

Does the rubber band appear to obey Hooke’s Law? If so, what is the spring constant?

*When done upload your spreadsheet, along with your worksheet, onto canvas.*

Conclusion: Summarize your findings (including relevant numbers, uncertainties, etc.), and compare them to your objective statement/hypothesis.