Name of the Experiment

Name:
Partner’s Name:

Elements of Physics
Section 001
Lab Instructor: John Hunt
Experiment Performed on: mm.dd.yyyy
Purpose:
Purpose and method: This should be short: a paragraph or two describing what
measurements were made and for what purpose. You are trying to show that you
understand the relationship between the experimental procedures and the theory. This can
sometimes be fairly obvious or simple and may only take a sentence or two. Procedural
details should not be given.

Calculations:
This section should provide a bridge between the theory outlined in the Purpose section and
the actual data and analysis in the Data and Analysis section. Relevant
formulas/derivations should be presented and any calculations or analysis you perform on
the data should be outlined here.

Data and Analysis:
You should include the original or photocopies of the original data sheets or printouts of
Excel tables. Remember to clearly label everything. Any manipulated data (e.g. linear
regressions, statistical analysis, formula evaluations) should be included. Include in your
calculations the units associated with any variable and, where appropriate, cancel units or
change them to derived units (e.g., change kg·m/s² to N). Any graphs or final results should
be presented last. Graphs absolutely must be labeled.

Conclusions:
This should include a brief discussion of the main findings that ties back to the Purpose. For
example: "We found that there is a linear relationship between the measured variable … and …
This can be seen from the graph and is predicted by the theory." Also state whether your
results agree with expectations to within the uncertainties of the measurements. Discuss the
main sources of error. Ask yourself, why are the values of error distributed in that way? Could
they be innate to the experiment’s procedure? Could they be the result of something we did
wrong? (It’s OK if you made mistakes during the experiment as long as you bring them up and
explain their effects on you results) Was the outcome of the experiment reasonable? Did it fulfill
the claims you made at the outset in the purpose? If not, try analyzing the reason why…etc.

Questions:
Answer any questions in the Lab Book.