

DESIGN AN EXPERIMENT

This is a planning sheet for an open-inquiry laboratory experiment. Your group will use the equipment available to design a laboratory experiment.

I. Purpose:

II. Necessary equipment and how it will be used

III. Labeled diagram of how the equipment will be set up

IV. Measurements that will be taken, with symbols that will be used for those measurements

V. Equations that will be used for calculations, using the symbols provided in the previous part

VI. Steps you will take during design or procedure to reduce experimental uncertainty

VII. Assumptions

VIII. Prediction of which measurement may cause the greatest uncertainty in your calculations and explain its specific effect (i.e., a higher or lower value than actual—and why)

IX. Graph(s) you will produce to analyze your data.

X. Other investigations that could be conducted using the same setup (or with modifications)