

Name(s):

Date:

Per:

## Speed of Sound Lab

### **I. INTRODUCTION:**

This is a paragraph that discusses background information that relates to your lab concepts. Summarize the topic in your own words. The rest of the information should come from class discussions, personal experiences (if any), and notes.

### **II. PROBLEM:**

The problem is written in the form of a question. Be sure to include dependent and independent variables where applicable.

### **III. PROCEDURE/MATERIALS:**

List the materials required to conduct the experiment. The procedure should be written in steps. Be very specific in your procedure such that someone who has never taken our class could follow your instructions and successfully conduct the experiment.

### **IV. THEORETICAL RESULTS:**

Using your procedure and the known speed of sound (343 m/s), what measurements do you expect? E.g. you might be measuring time and a given distance and using them to calculate speed. Using the known speed of sound and the distances established in your procedure, what times do you expect to measure?

### **V. DATA/OBSERVATIONS:**

This will include all data collected in the form of the charts, tables, drawings, diagrams, and/or graphs to explain or demonstrate your observations in the lab. Be sure that your graphs, tables, figures, or diagrams are neatly, completely, and properly labeled with a complete title.

### **VI. CONCLUSION:**

What happened in the lab — was your hypothesis right or wrong? What did you learn? What further experiments might be done to further the study? Discuss sources of error (“human error” is not good enough. *Be specific*).