**Doppler Effect Lab Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Hypothesis:**

**If** the source of a sound is moving and I am stationary, **then** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Materials:**

* You will need one of each of the following items for your group
  + String
  + Tennis ball
  + 9V battery
  + Battery clip
  + Alarm
  + Pen/pencil
  + This lab handout

**Methods:**

* Assembly (\*be careful, use common sense\*)
  + Twist the red wires together, connecting the alarm buzzer to the battery connector
    - Apply small amount of tape
  + Twist the black wires together, connecting the alarm buzzer to the battery connector
    - Apply small amount of tape
  + Click the batter connector to the 9V battery
  + Insert the alarm buzzer and battery into the tennis ball
    - Be careful not to jiggle loose any wires
* Listen to the sound of the buzzer with the ball sitting still on your lab table
* Have one group member grab the end of the rope and begin to spin the ball in a circle
  + Don’t hit people with it, be careful
* Make observations
* Stop swinging the ball, remove the alarm buzzer and battery, disconnect the battery.

**Results:**

\* What happened? What observations did you make? Did it work? This is the section where you state what happened. Don’t worry about why or how here, just simply state your results and observations.

**Conclusion:**

Why? How? This is the section where you explain your results and explain your hypothesis.

Draw a diagram of what you think is happening. The diagram should include sound waves, the tennis ball, and you.