Materials: clock or watch with a second hand, graph paper, tennis ball, record sheet.

Procedure:

1. Pair up with 1 or 2 other students. Decide who will be the bouncer, recorder and counter. Record the names below:

    Bouncer_____ can be the same as the Counter

    Recorder_____

    Counter_____

2. Locate a clock or watch with a SECOND hand, the bouncer will sit in a chair and bounce the tennis ball once, catch it, and then bounce it again, catch it…repeat the bounce and catch for 2 minutes in an even and steady pace. The bounce should be even so that the counter can count it in an even pace. DO NOT THROW THE BALL or be out of control of the ball when bouncing or catching.

3. The recorder will record below, every 20 seconds, how many times the ball hits the floor. Begin the count with 1 every 20 second interval to avoid missing a bounce. At the end of the 5th trial, take the average of the 5 trials by the 20-second interval. Then record the Cumulative Count using the average count you calculated. The recorder can be the counter. Reminder: the counter is to count every bounce.

4. Graph your average result on a graph paper. What is your x-axis? _____ What is your y-axis?_____   What does X represent?_____   What does Y represent?_____   What are your units? _____ What's the range of your x-axis? _____ What's the range of your y-axis?_____ Divide the x-y axes into equal increments for plotting the coordinates. What are your units per increment?_____ What type of graph do you expect?_____ How does the graph differ by group? _____ Share/hand in your graph.

5. Record your trials below

Time/Trial	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Average Count	Cumulative count	Coordinates (X,Y)
20 seconds								
40 sec								
1 min								
1min 20 sec								
1 min 40 sec								
2 min								