## The Science of Swinging: Graphing Worksheet

1. Choose four different lengths of string, and count the number of swings of the pendulum in 15 seconds. Don't forget to start from the same angle for each test!

Length of String (cm)	# of Swings
10	
20	
30	
40	

- 2. Based off of your results above, can you predict what the motion (# of swings) is when the pendulum string is 50 cm and 60 cm in length?
- 3. Does the angle that you start the pendulum at affect the number of swings? Take out a protractor and give it a try! For one length of string, start the pendulum at 4 different angles and count the number of swings that occur in 15 seconds?

Release Angle	# of Swings

4. In the space below, draw a line graph showing the length of the string on the x-axis vs. the amount of times that the pendulum swings on the y-axis.