

Name: _____ Partner: _____ PH2223 - ____

Experiment Sheet for The Scientific Method

Part 1: The Effect of Mass

What length (L) did you use when checking mass? _____

Approximately, what angle did you release the bob from each time? _____

*You may or may not need the 4th and/or 5th columns in the table below (this will depend on your findings).***Mass and Period data table**

mass (g)	total time (s)	T (s)		

Questions:

1. Was period a function of mass? _____
2. If you answered no explain why not; if you answered yes then what is the mathematical relationship between period and mass (show the equation)?

Part 2: The Effect of Length

What mass did you use when checking length (L)? _____

Approximately, what angle did you release the bob from each time? _____

You may or may not need the 4th and/or 5th columns in the table on the next page (this will depend on your findings).

Length and Period data table

L (m)	total time (s)	T (s)		
0.15				
0.30				
0.45				
0.60				
0.75				
0.90				
1.05				
1.20				
1.35				
1.50				
1.65				
1.80				
1.95				

Questions:

3. Was period a function of length? _____
4. If you answered no explain why not; if you answered yes then what is the mathematical relationship between period and length (show the equation)?

Graphs: You are expected to attach at least three graphs to the back of this page (T vs. mass, T vs. L , and T vs. $\frac{1}{L}$). For the linear graph find the slope and show your work for finding the slope on the graph.