

NAME _____

PHYS221
Prelab- Experiment 11
Simple Harmonic Motion

1. What is the objective of this experiment? 1 pt.

2. What is simple harmonic motion? 1pt.

3. What physical phenomena does the relationship $T = 2\pi\sqrt{\frac{L}{g}}$ describe? 1 pt.

4. What physical phenomena does the relationship $T = 2\pi\sqrt{\frac{m}{k}}$ describe? 1 pt.

5. The following data was collected for part 2 (steps 5 & 6) of lab procedure. You are to complete the table. All distances are measured from the *bottom of hanger to the top of the table*. You should ignore the weight of the hanger. 3 pts.

mass (g)	height (cm)	Δx (m)	Force (N)
0	56.5	0	0
100	46.5		
200	36.5		
300	25.5		
400	15.5		
500	5.5		

6. Briefly summarize the procedure. Separate parts I and II. 3pts.