

PHYS221
Prelab- Experiment 12
Simple Harmonic Motion

1. What is the objective of this experiment

2. What is simple harmonic motion? 1pt.

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

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.

<u>mass (g)</u>	<u>height (cm)</u>	<u>$\Delta x(m)$</u>	<u>Force (N)</u>
0	56.5	0	0
100	46.5		
200	36.5		
300	25.5		
400	15.5		