Name: _____

Period: _____

HW Unit 10:2—Harmonic Motion
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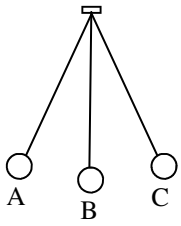
A-day: Due Mon., 3/23 (Assig: 4/17)
B-day: Due Tues., 3/24 (Assig: 4/18)

1. Frequency, Period, Wavelength, or Velocity?
   A. ____ Tells you the number of cycles each second.
   B. ____ Measured in meters or centimeters.
   C. ____ Tells you how long it takes one cycle to repeat.
   D. ____ Measured in Hertz (Hz).
   E. ____ Measured in seconds.
   F. ____ How far it is from one wave to the next.
   G. ____ How fast a wave is moving.
   H. ____ Measured in meter/sec (m/s).
2. A ball is dropped on the ground and bounces several times before it stops moving. Is this harmonic motion?
3. Why or why not?
4. Use the pendulum to answer these questions.
   A. If the pendulum at letter C, one cycle ends at letter: _____.
   B. The pendulum will come to rest at its equilibrium position at letter: _____.
   C. How far it swings is called its:



5. With the slinky outside the room, what caused the wave speed to change?
6. Longitudinal or transverse wave?
   A. ___ When I pushed it towards the other side.
   B. ____ When I moved my hand side-to-side.

7. As the amplitude of a wave or pendulum gets bigger, the period changes or stays the same?
8. A 20 m wave is vibrating at 4 Hz. Find its speed.
   Variables Equation Solve
9. Use the graph at the right to answer the following.
   A. What is its amplitude?
   B. How many cycles are shown on the whole graph?
   C. What is the period?