

Name: \_\_\_\_\_

Period: \_\_\_\_\_

**HW Unit 10:9—Review**  
**Mr. Murray, IPC**  
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**A-day: Due Tues., 5/15 (Assig: 5/11)**  
**B-day: Due Wed., 5/16 (Assig: 5/14)**

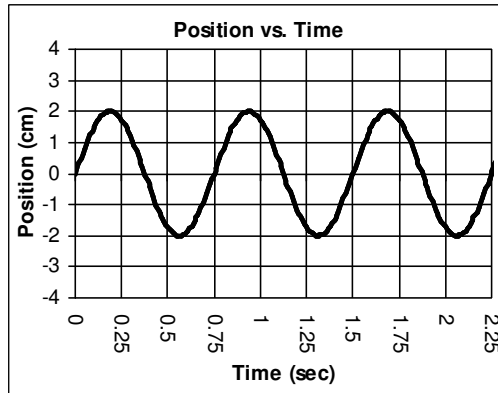
1. Which of the following affects (changes) the period of a pendulum: length; mass; amplitude?
2. Is a wheel spinning harmonic motion? Why or why not?
3. What is a seismic wave?
4. Using RGB: A) lights or paints? B) Make black: \_\_\_\_\_  
B) how do you make white \_\_\_\_\_; magenta \_\_\_\_\_.
5. Using CMYK: A) lights or paints? B) Make black: \_\_\_\_\_  
B) how do you make white \_\_\_\_\_; Make green: \_\_\_\_\_.
6. Which has a longer wavelength: gamma rays or infrared light?

7. What is faster than light?
8. Twice as loud as 40 dB is: \_\_\_\_\_.
9. Use the harmonic at the right to answer the following:
  - A) Which harmonic is it?
  - B) How many nodes does it have?
  - C) How many wavelengths is it?
  - D) Find the frequency of the fundamental.
  - E) Find the frequency of harmonic 2.
  - F) Find the period of the harmonic.



120 Hz

10. What is the wave's amplitude?
11. How many wavelength are shown?
12. Find the wavelength.
13. If it has a frequency of 10 Hz, find its speed.
14. A) If the above was a sound wave, could we hear it?  
B) Why or why not?



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15. If two waves interfere with each other constructively, do they add or subtract energy from each other?
16. If you push (compress) the slinky the same direction as it moves, is this a transverse or longitudinal wave?
17. What are the units for frequency?
18. You hear lightening 2 seconds after you see the lightening. How far away is the storm?