*Describing Waves MOD Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

Need more help? Visit: Lesson 2 of the Waves chapter at The Physics Classroom:

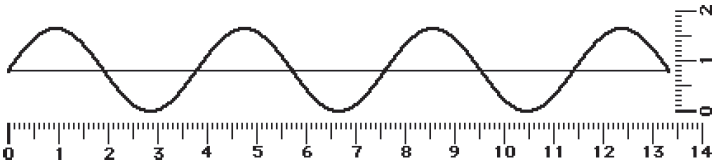
<http://www.physicsclassroom.com/Class/waves/u10l2a.html>

<http://www.physicsclassroom.com/Class/waves/u10l2b.html>

<http://www.physicsclassroom.com/Class/waves/u10l2c.html>

<http://www.physicsclassroom.com/Class/waves/u10l2d.html>

1. Label the graph below with the following letters:
   1. Nodal line (aka your zero line)
   2. Crest
   3. Trough
   4. Amplitude
   5. Wavelength



1. Using the rulers seen in question #1, measure the wave’s wavelength and amplitude.

a. Wavelength =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ b. Amplitude = =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Period or Frequency*

1. The number of cycles of a periodic wave per unit time is called the wave's \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. The amount of time for a single periodic wave to occur is called the wave's \_\_\_\_\_\_\_\_\_\_\_\_\_.
3. A pendulum makes 40 vibrations in 20 seconds. Calculate its period? ***(T = time/cycle)***

a. 0.5 sec b. 2 sec c. 800 sec

1. A period of 5.0 seconds corresponds to a frequency of \_\_\_\_\_ Hz. ***(f = 1/T)***

a. 0.2 b. 0.5 c. 0.02 d. 0.05 e. 0.002

1. The period of a 261-Hertz sound wave is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. ***(T = 1/f)***

a. 0.004 sec b. 130 sec c. 261 sec

1. As the frequency of a wave increases, the period of the wave \_\_\_\_\_\_\_\_\_\_\_.

a. decreases b. increases c. remains the same

1. Mac and Tosh are resting on top of the water near the end of the pool when Mac creates a surface wave. The wave travels the length of the pool and back in 25 seconds. The pool is 25 meters long. Determine the speed of the wave. ***(v = speed in meters per second)***

1. What is the frequency of the wave seen below? ***(Rearrange your speed equation: f = v/λ)***

a. 0.33 Hz b. 2 Hz c. 18 Hz

