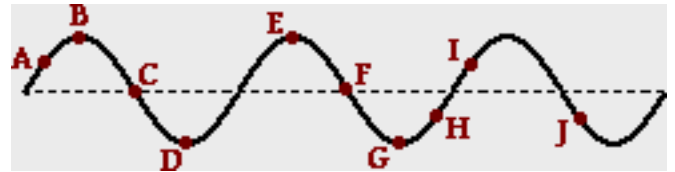


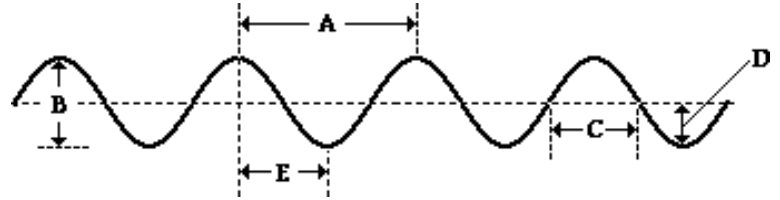
DESCRIBING WAVES

1. A wave is introduced into a medium and a snapshot of the medium at a particular instant in time is shown at the right. Several positions along the medium are labeled. Categorize the positions as either crests or troughs.

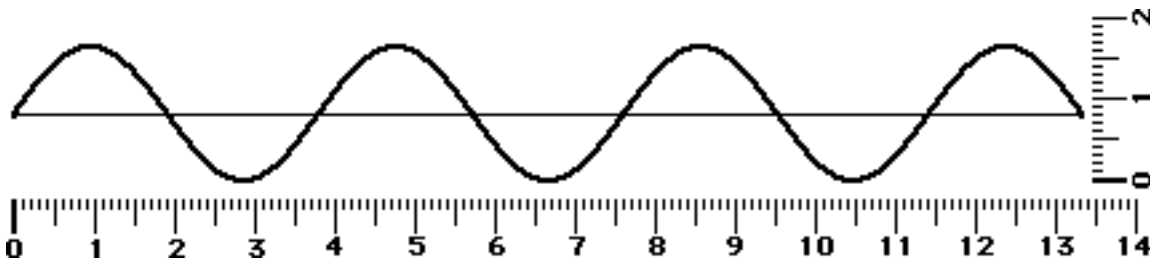


Crests: _____ Troughs: _____ Neither: _____

2. The wavelength of the wave in the diagram below is given by letter _____ and the amplitude of the wave in the diagram below is given by letter _____.



3. A sine curve that represents a transverse wave is drawn below. Use the centimeter ruler to measure the wavelength and amplitude of the wave (show units).



a. Wavelength = _____ b. Amplitude = _____

4. Any repeated and periodic motion can be described by a frequency. For instance, the frequency of rotation of a second hand on a clock is _____.

- a. 1/60 Hz b. 1/12 Hz c. 1/2 Hz d. 1 Hz e. 60 Hz

5. A pendulum makes 40 vibrations in 20 seconds. Calculate its period?

6. The period of a 261-Hertz sound wave is _____.

7. As the frequency of a wave increases, the period of the wave _____.

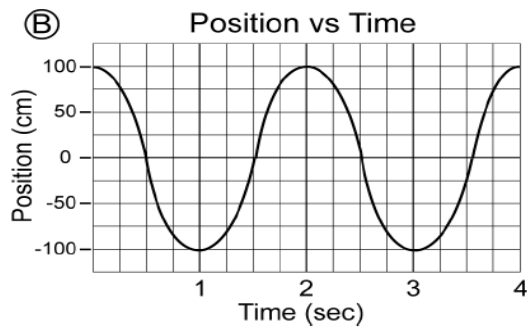
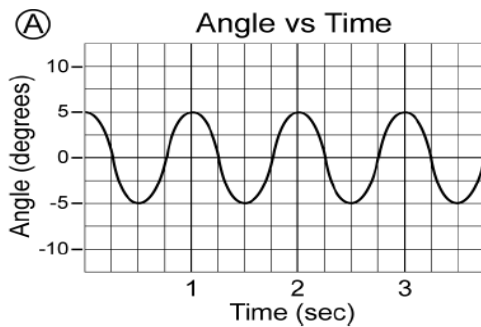
a. decreases b. increases c. remains the same

8. The speed of a wave refers to

a. how often it vibrates to and fro.
b. how high it vibrates.

c. how much time it takes to vibrate to and fro.
d. how far a given point (e.g., a crest) on the wave travels per unit of time.

9. Use the graphs to answer the following questions



10.

- a. What is the amplitude of each vibration?
b. What is the period of each vibration?