Name: _____ **Period:** _____

AP 2 Waves refresher

"You never really know what's coming. A small wave, or maybe a big one. All you can really do is hope that when it comes, you can surf over it, instead of drown in its monstrosity."
– Alysha Speer

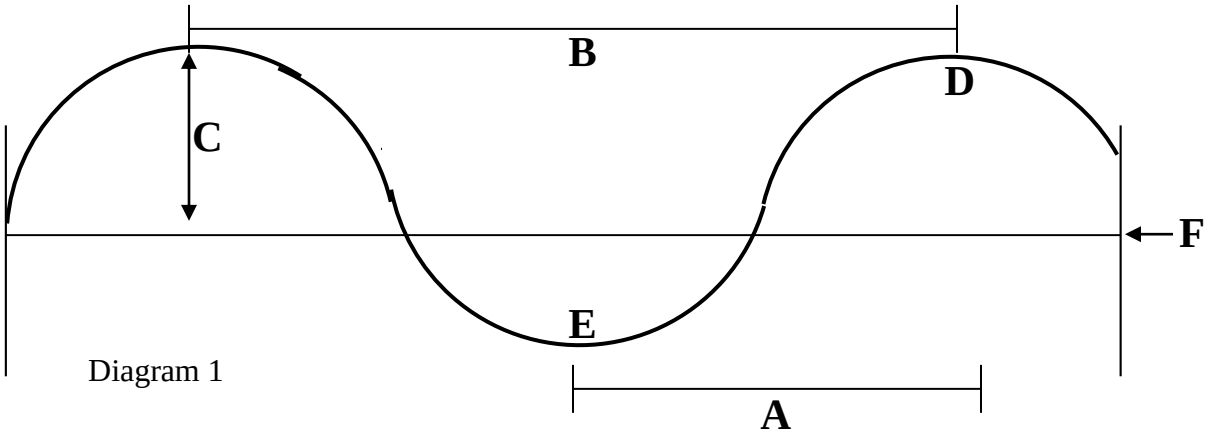

Diagram 1

Match the letter above to the term below.

1. Wavelength
2. Equilibrium
3. Trough
4. Amplitude
5. Crest

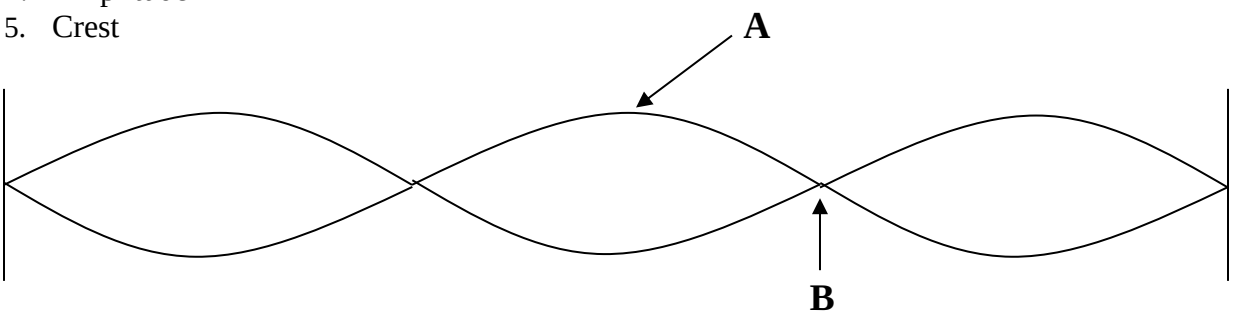

Diagram 2

(Use Diagram 2 to answer 6-9.)

6. Where is the antinode, A or B?

7. How many nodes are there?

8. Using Diagram 2, What type of interference is occurring at letter "A" constructive or destructive interference?

9. What type of wave is shown in diagram 2?
    a. Wave Pulse
    b. Surface Wave
    c. Standing Wave
    d. Longitudinal Wave

Name: _____ **Period:** _____

Matching *(Use the word bank to answer the following questions)*

Word Bank

A. Wavelength
B. Crest
C. Trough
D. Amplitude
E. Period
F. Frequency
G. Constructive Interference
H. Destructive Interference
I. Transverse Wave
J. Longitudinal Wave
K. Wave Pulse
L. Node
M. Antinode

10. The shortest time interval during which the motion of a wave repeats itself is the _____ of the wave.

11. The maximum displacement from the rest position is the _____ of a wave.

12. In a _____, particles of the medium vibrate perpendicular to the direction of the wave.

13. The shortest distance between points where the wave pattern repeats itself is the _____ of the wave.

14. When two waves meet, the point of maximum displacement is called a(n) _____.

15. Superposition of waves that have displacements in opposite directions. _____

16. A single disturbance that travels through a medium is a(n) _____.

17. Superposition of waves that have displacements in the same directions. _____

18. The number of complete vibrations per second measured at a fixed location. _____

19. What is the frequency of sound wave played by a clarinet if the length of the wave is 1.49 m if the speed of sound is 340 m/s?

20. A radio station broadcasts at 680 kHz. What is the wavelength at this frequency?

21. A submarine sends a sonar pulse of frequency 30,000 Hz at a lurking submarine. The velocity of sound in seawater is 1540 m/s and it takes 3.5 seconds for the sonar pulse to return.
    a. What is the wavelength of the sonar wave?

    b. How far away is the lurking submarine?