

NAME \_\_\_\_\_  
PERIOD \_\_\_\_\_

**QUIZ #18D**  
**WAVE TERMINOLOGY**

**Matching: Each of the following statements matches up with one of the terms at the bottom of the page. Read each statement and then select the BEST term [only one per statement!] and place the corresponding letter in the space provided. Please use capital, block letters! [1 pt each]**

- \_\_\_\_ 1. According to this, the angle with which a wave strikes an interface will be equal to the angle with which the wave bounces off the interface.
- \_\_\_\_ 2. Any multiple of the fundamental frequency.
- \_\_\_\_ 3. The process of limiting a transverse wave's vibrations to a single plane.
- \_\_\_\_ 4. According to this characteristic, long waves should be better able to bend around barriers than short waves.
- \_\_\_\_ 5. A point in a longitudinal wave where the density of the medium is less than the equilibrium density.
- \_\_\_\_ 6. This is the amount of time required to produce one full wave.
- \_\_\_\_ 7. A wave where the displacement of the medium is in the same direction as the motion of the wave.
- \_\_\_\_ 8. Every mechanical wave requires this in order to exist.
- \_\_\_\_ 9. The resistance of a medium to the passage of a wave.
- \_\_\_\_ 10. According to this, as a wave passes through an interface the ratio of the speeds in the two mediums will be equal to the ratio of the sines of the angles in these two mediums.
- \_\_\_\_ 11. When two waves occupy the same position in a medium at the same time so as to produce a new wave which has an amplitude larger than either of the waves separately.
- \_\_\_\_ 12. This occurs when the frequency of the driving force is the same as a system's natural vibrational frequency.
- \_\_\_\_ 13. Any wave where the displacement of the medium is perpendicular to the direction of motion of the wave
- \_\_\_\_ 14. Any time two waves occupy the same place at the time this wave interaction is the result.
- \_\_\_\_ 15. Any place in a standing wave pattern where complete destructive interference always occurs.

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|------------------------------|-----------------------|----------------------|-----------------------------|
| A. amplitude                 | J. elastic medium     | S. Law of Refraction | BB. rarefaction             |
| B. antinode                  | K. frequency          | T. Law of Reflection | CC. rectilinear propagation |
| C. attenuation               | L. fundamental        | U. longitudinal      | DD. refraction              |
| D. compression               | M. harmonic           | V. node              | EE. resonance               |
| E. constructive interference | N. Huygen's Theorem   | W. normal            | FF. standing wave           |
| F. crest                     | O. impedance          | X. period            | GG. superposition           |
| G. damping                   | P. impedance matching | Y. phase             | HH. transverse              |
| H. destructive interference  | Q. interface          | Z. polarization      | II. trough                  |
| I. diffraction               | R. interference       | AA. pulse            | JJ. wavelength              |