

Waves Review

## Ch 1, 2-1 &amp; Analog vs Digital

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|--------------------------------|---|
| 1. _____ wave                  | A. wave that consists of electric and magnetic fields and does not require a medium to exist  |
| 2. _____ vibration             | B. greatest distance from resting position of a wave  |
| 3. _____ medium                | C. number of waves that pass a certain point in a given amount of time  |
| 4. _____ mechanical waves      | D. wave that disturbs a medium  |
| 5. _____ electromagnetic waves | E. a space in the medium in which the particles are crowded together  |
| 6. _____ crests                | F. traveling disturbance that carries energy from one place to another  |
| 7. _____ troughs               | G. high point of a wave   |
| 8. _____ amplitude             | H. movement that follows the same path over and over again  |
| 9. _____ wavelength            | I. wave in which the motion of the medium is parallel to the direction of the wave  |
| 10. _____ frequency            | J. a space in the medium in which there are fewer particles   |
| 11. _____ transverse wave      | K. low point of a wave  |
| 12. _____ longitudinal wave    | L. wave that consists of a combination of transverse and longitudinal waves and occurs at the surface between two different mediums |
| 13. _____ surface wave         | M. wave in which the motion of the medium is at right angles to the direction of the wave   |
| 14. _____ compression          | N. material through which a mechanical wave travels   |
| 15. _____ rarefaction          | O. distance between two consecutive similar points on a wave  |

16. What type of wave is a sound wave?
17. What wave characteristic would you consider if you wanted to know how much energy the wave is carrying?
18. Be able to label the characteristics of a wave on a diagram.
19. How do you calculate the speed of a wave? (Know the formula)
20. How does the speed of sound compare to the speed of light?
21. What type of signal (analog or digital) encodes information in numbers by sampling at intervals?
22. What type of signal (analog or digital) sends information with continuous waves?