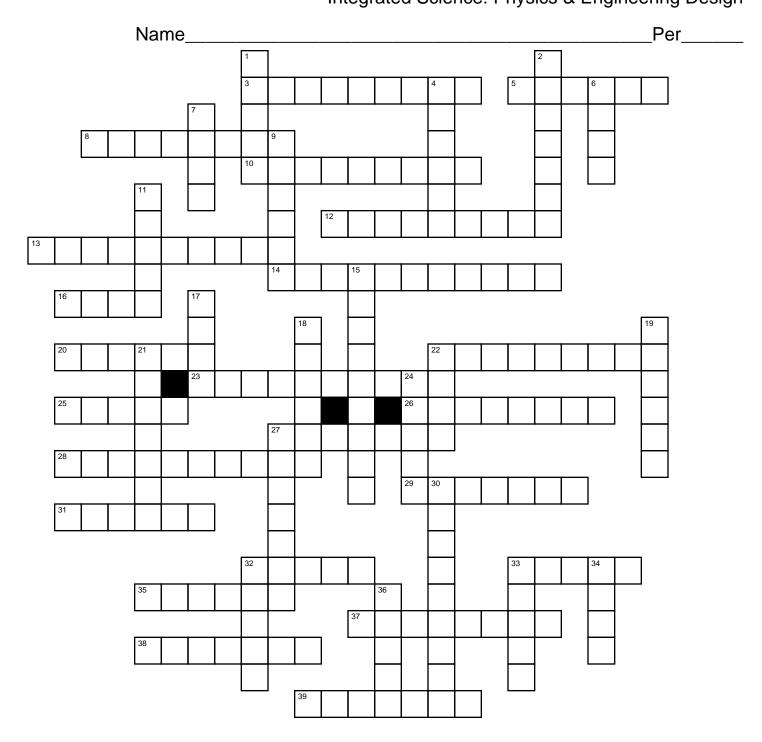
Chapter 24: Waves & Sound Integrated Science: Physics & Engineering Design



Across

- 3. The science and technology of sound is called
- 5. Low point of a wave
- 8. Reflection is the process of a wave bouncing off
- 10. Linear motion is motion that goes from one place to another without ___
- place to another without ___.

 12. Frequency and period are ___ related.

Down

- 1. ___ waves are a form of harmonic motion.
- 2. A pendulum is a device that swings back and forth due to the force of
- 4. Diffraction is the process of a wave bending around a ___ or passing through an opening.
- 6. A cycle is a ____ of repeating motion.7. The oscillations of a longitudinal wave are in the direction that the wave moves.
- 9. 1 Hertz is 1 cycle per ____.

Across

- is the process of diminishing the amplitude and energy of a wave as it passes through a material.
- 14. ____ interference happens when waves add up to make a smaller, or zero, amplitude.
- Both frequency and period tell us the ____ information.
- We use the Greek letter ____ for wavelength.
- 22. How often something repeats
- 23. The oscillations of a ____ wave are NOT in the direction that the wave moves.
- 25. A travelling oscillation of atoms or pressure.
- A repetative force.
- 27. Unit for measuring the strength or intensity of sound.
- 28. An ____ is a physical system that has repeating cycles.
- 29. The gradual loss of amplitude due to friction.
- 31. Constructive interference happens when waves add up to make a ____ amplitude.
- 32. Unit of frequency
- 33. High point of a wave.
- 35. A vibrating ____ string is an example of an oscillator.
- 37. Wavelength is the ____ from any point on a wave to the same point on the next cycle of the wave.
- 38. The frequency at which a system oscillates when disturbed.
- 39. The ____ provides us with our ability to interpret sound to hear.

Down

- 11. Resonance is an exceptionally large amplitude the develops when a periodic ____ is applied at the natural frequency.
- 15. A wave is a ___ oscillation that has the properties of frequency, wavelength and amplitude.
- 17. The oscillation between two sounds that are close in frequency.
- 18. Supersonic describes speeds that are ____ than the speed of sound.
- Harmonic motion is motion that repeats in ___
- 21. Refraction is the process of a wave ____ as it crosses a boundary between two materials.
- Sound can be something you hear, but you can also ____ it.
- Wave ____ is the frequency times the wavelength.
- The __ Effect in an increase or decrease in frequency caused by the motion of hte source of an oscillation, such as sound.
- The amount that a cycle moves from the equilibrium.
- 32. Listening to loud sounds for a long time can cause the ___ on the nerves in the cochlea to weaken or break off, causing permanent damage.
- 33. The period is the time it takes for one complete ____ to happen.
- Resonance happens when a periodic force has the ____ frequency as the natural frequency.
- 36. The "highness" or "lowness" that you hear at difference frequencies of sound waves.