Quizlet

Physical Science Unit 6 - Waves

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1.	**Amplitude**	The maximum distance that the particles of a wave's medium vibrate from their rest position
2.	**Amplitude Modulation**	A method of transmitting signals by changing the amplitude of a wave.
3.	**Antinode**	A point where a crest or trough occurs midway between two nodes
4.	**Compression**	An area where the particles in a medium are spaced close together
5.	**Constructive Interference**	The interference that occurs when two waves combine to make a wave with a larger amplitude
6.	**Crest**	Highest point of a wave
7.	**Decibel**	A unit that compares the intensities of different sounds
8.	**Destructive Interference**	The interference that occurs when two waves combine to make a wave with a smaller amplitude
9.	**Diffraction**	The bending of a wave as it moves around an obstacle or passes through a narrow opening
10.	**Doppler Effect**	A change in sound frequency caused by motion of the sound source, motion of the listener, or both.
11.	**Electric Field**	A field of force surrounding a charged particle
12.	**Electromagnetic Radiation**	The transfer of energy by electromagnetic waves traveling through matter or across space
13.	**Electromagnetic Spectrum**	All of the frequencies or wavelengths of electromagnetic radiation
14.	**Electromagnetic Waves**	Transverse waves consisting of changing electric fields and changing magnetic fields
15.	**Frequency**	The number of complete wavelengths that pass a point in a given time
16.	**Frequency Modulation**	A method of transmitting signals by changing the frequency of a wave
17.	**Hertz**	Unit of measurement for frequency. Cycles per second.
18.	**Intensity**	The rate at which a wave's energy flows through a given unit of area.
19.	**Interference**	The combination of two or more waves that results in a single wave
20.	**Longitudinal Wave**	A wave in which the vibration of the medium is parallel to the direction the wave travels
21.	**Loudness**	A physical response to the intensity of sound, modified by physical factors
22.	**Magnetic Field**	The region around a magnet where the magnetic force is exerted.
23.	**Mechanical Wave**	A disturbance in matter that carries energy from one place to another. Requires a medium through which to travel.
24.	**Medium**	Material through which a wave travels
25.	**Node**	A point on a standing wave that has no displacement from the rest position
26.	**Period**	The time required for one cycle, a complete motion that returns to its starting point.
27.	**Periodic Motion**	Any motion that repeats at regular time intervals
28.	**Photoelectric Effect**	The emission of electrons from a metal when light shines on the metal
29.	**Photons**	Packets of electromagnetic energy
30.	**Pitch**	Perception of the frequency of a sound
31.	**Rarefaction**	An area where the particles in a medium are spread out
32.	**Reflection**	The bouncing back of a wave when it hits a surface through which it cannot pass.
33.	**Refraction**	The bending of a wave as it passes at an angle from one medium to another
34.	**Resonance**	The response of a standing wave to another wave of the same frequency
35.	**Sonar**	A technique for determining the distance to an object under water
36.	**Sound Waves**	A longitudinal wave consisting of compressions and rarefactions, which travels through a medium
37.	**Standing Wave**	A wave that appears to stay in one place
38.	**Surface Wave**	A wave that travels along a surface separating two media.
39.	**Thermograms**	Color-coded pictures that show variations in temperature
40.	**Transverse Wave**	A wave in which the vibration is at right angles to the direction in which the wave is traveling.
41.	**Trough**	Lowest point of a wave
42.	**Wavelength**	The distance between two corresponding parts of a wave