

Across

3. such as an electromagnetic wave, that is propagated in a direction perpendicular to the direction of displacement of the transmitting field or medium.

5. wave n (General Physics) a wave that is propagated in the same direction as the displacement of the transmitting medium.

 ${\bf 8.}$ physics is used to describe the swinging motion of a pendulum that is caused by gravity.

12. is the change in direction of a wavefront at an interface between two different media so that the wavefront returns into the medium from which it originated.

13. is a phenomenon in which two waves superpose to form a resultant wave of greater, lower, or the same amplitude.

14. refers to various phenomena which occur when a wave encounters an obstacle

16. the change in direction of a wave passing from one medium to another caused by its change in speed.

<u>Down</u>

1. repeated in equal intervals of time.

2. is a phenomenon in which a vibrating system or external force drives another system to oscillate with greater amplitude at specific frequencies.

4. is a disturbance that transfers energy through matter or space, with little or no associated mass transport.

6. the maximum extent of a vibration or oscillation, measured from the position of equilibrium.

7. the shift in frequency (Doppler shift) of acoustic or electromagnetic radiation emitted by a source moving relative to an observer as perceived by the observer: the shift is to higher frequencies when the source approaches and to lower frequencies when it recedes.

9. such as mechanical oscillations, noise, and alternating electric currents, by dissipation of energy.
10. is the spatial period of a periodic wave-the distance over which the wave's shape repeats.
11. the number of waves that pass a fixed point in unit time
15. the time for a particle on a medium to make one complete vibrational cycle