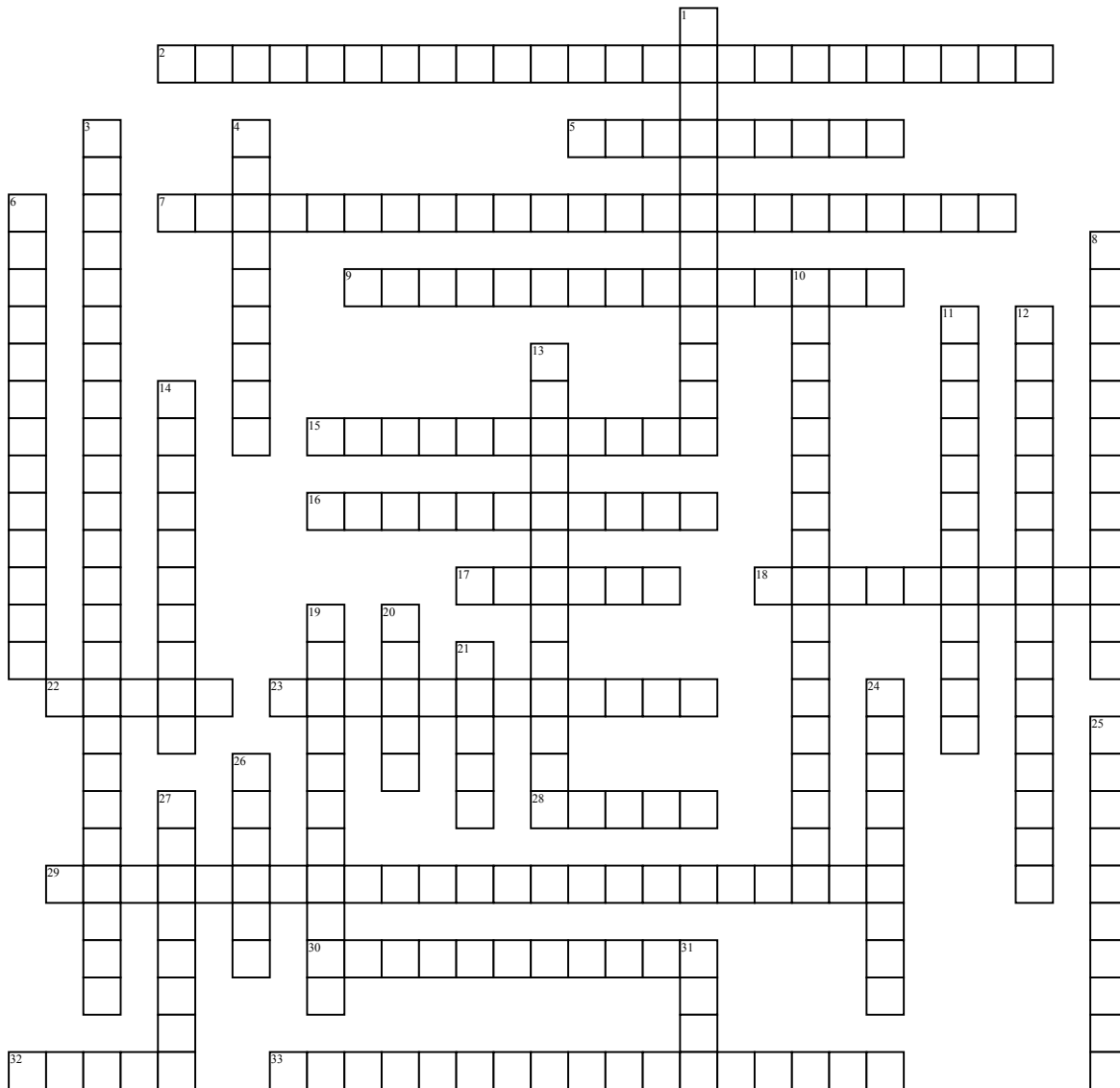


# Waves Vocabulary



## Across

2. the resultant of similar vector quantities at a point is a function of the sum of the individual quantities  
 5. the displacement of a wave from zero  
 7. the entire distribution of electromagnetic radiation according to frequency or wavelength  
 9. when a ray of light reflects off a surface, the angle of incidence is equal to the angle of reflection  
 15. a ray of light that is pointing towards and striking a surface.  
 16. the bending of waves around obstacles or corners  
 17. the time taken for one complete cycle of vibration to pass a given point  
 18. the change in direction of a wave passing from one medium to another caused by its change in speed  
 22. the periodic and repeating fluctuations heard in the intensity of a sound when two sound waves of very similar frequencies interfere with one another  
 23. rays of light or similar radiation exhibit different properties in different directions  
 28. the point on a wave with the maximum value or upward displacement within a cycle  
 29. the interference of two waves of equal frequency and opposite phase, resulting in their cancellation where the negative displacement of one always coincides with the positive displacement of the other

30. a periodic motion that repeats itself in a regular cycle

32. a single disturbance that moves through a medium from one point to the next point

33. the angle made by a reflected ray with a perpendicular to the reflecting surface.

## Down

1. the light that is reflected  
 3. the interference of two or more waves of equal frequency and phase, resulting in their mutual reinforcement and producing a single amplitude equal to the sum of the amplitudes of the individual waves.  
 4. the refraction of light in any situation, regardless of what the two media are  
 6. the change in frequency or wavelength of a wave in relation to an observer who is moving relative to the wave source  
 8. the net effect of the combination of two or more wave trains moving on intersecting or coincident paths  
 10. measure of the extent to which a substance slows down light waves passing through it  
 11. a wave whose displacement has a periodic variation with time or distance, or both  
 12. the angle that a line (such as a ray of light) falling on a surface or interface makes with the normal drawn at the point of incidence  
 13. electromagnetic radiation of a single frequency

14. the wavelength is the spatial period of a periodic wave—the distance over which the wave's shape repeats.  
 19. the act or process of propagating, especially the process by which a disturbance, such as the motion of electromagnetic or sound waves, is transmitted through a medium such as air or water  
 20. a stage or fraction in the cycle of an oscillation, such as the wave motion of light or sound waves  
 21. equivalent to the frequency of sound waves, which are any compression waves in a medium  
 24. the number of waves that pass a fixed point in unit time  
 25. the return of light or sound waves from a surface  
 26. the lowest point on a wave  
 27. the region of maximum amplitude between two adjacent nodes in a standing wave  
 31. a point along a standing wave where the wave has minimum amplitude