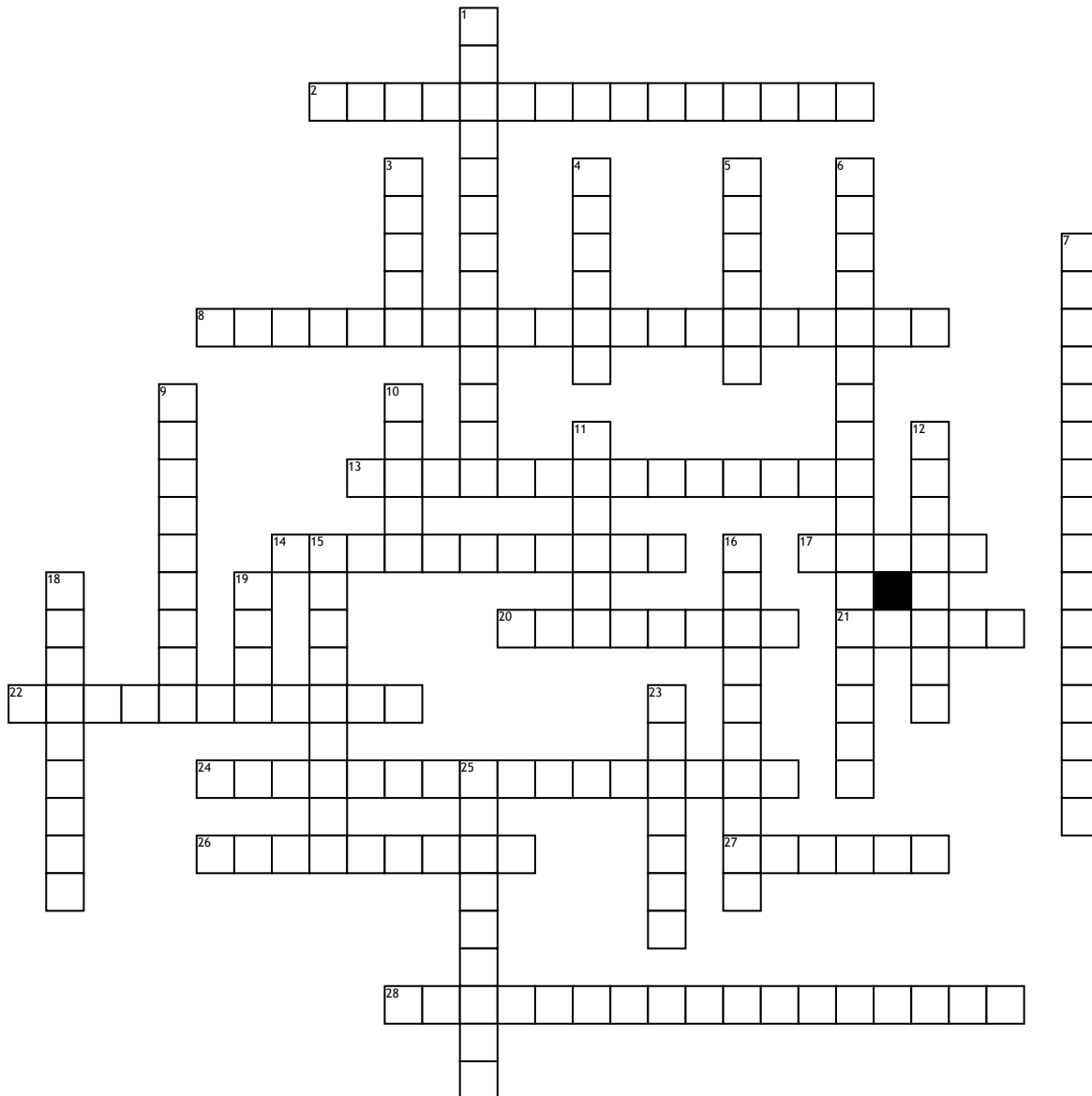


# Crossword Puzzle Assignment



## Across

2. constant and steady pressure  
 8. a smooth back and forth motion  
 13. The displacement of the medium is perpendicular to the wave  
 14. Molecules move farther apart  
 17. Maximum upward displacement  
 20. Deals with time  
 21. A disturbance (sound source) creates changes in pressure throughout an elastic medium.  
 22. Molecules move closer together  
 24. frequency at which an object vibrates freely and is determined by the object's length, density, tension, and stiffness.  
 26. Used to visually represent simple harmonic motion or all the energy located at one frequency.

## 27. Lowest point in a cycle

28. The displacement of the medium is parallel to the wave

## Down

1. An object that vibrates at its own natural or resonant frequency  
 3. one compression and one rarefaction  
 4. time it takes for one cycle to occur  
 5. "the quantity of three-dimensional space occupied by a liquid, solid, or a gas  
 6. known as compression  
 7. known as rarefaction  
 9. is something that is set into vibration by the action of another vibration  
 10. "any influence that causes an object to undergo a change in speed, a change in direction, or a change in shape"

11. an intervening substance through which a force acts or an effect is produced

12. a force that "acts perpendicularly on a surface"

15. "Maximum distance away from rest position that the molecule is displaced"

16. The property of an object to return to its original shape

18. "is the condition of a vibrating system that is driven by a periodic force at the natural frequency of the system. Under this condition, the amplitude of the vibration can become very large."

19. "refers to the amount of matter in an object"

23. An object in motion stays in motion, an object at rest stays at rest

25. number of cycles per second