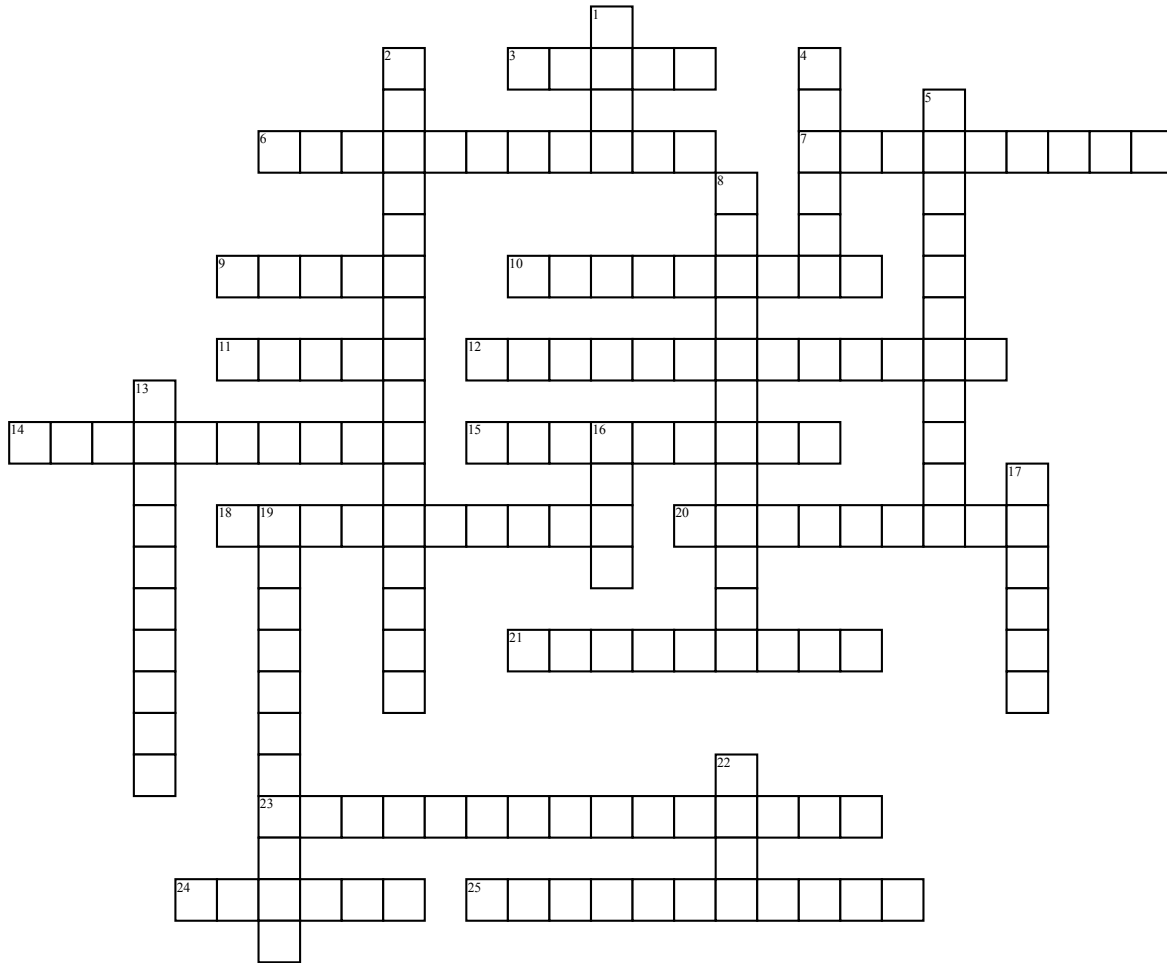


Name: _____

Date: _____

Waves, Sound, and Optics



Across

3. High energy electromagnetic waves that are between ultraviolet light and gamma rays in the electromagnetic spectrum
6. Matter through which visible light is easily transmitted
7. The emission of energy in the form of EM waves.
9. highest point of a wave
10. Maximum distance the wave vibrates from the rest position
11. how fast an object moves
12. The apparent change in the frequency caused by the motion of either the listener or the source of the sound.
14. Occurs when a wave bounces back after striking an object
15. The speed at which a wave travels.

18. The distance between any adjacent crests or compressions in a series of waves.
20. When an object vibrates at or near the resonant frequency of the second object causes the second object to vibrate
21. The number of waves produced in a given amount of time
23. Waves in which the particles of the medium vibrate with an up and down motion
24. Lowest point of a wave
25. In a body of water, is an example of a combination of both transverse and longitudinal waves.

Down

1. Any disturbance that transmits energy through matter or space.

2. Waves in which the particles of the medium vibrate back and forth along the path that the wave travels.
4. the time it takes for one cycle
5. The bending of waves around a barrier or through an opening
8. The result of two or more waves overlapping
13. Sounds with frequencies that are higher than 20,000HZ
16. A reflected sound wave
17. A solid, liquid or gas that is vibrated.
19. The transfer of energy carried by light waves to particles of matter
22. A disturbance that transfers energy from place to place