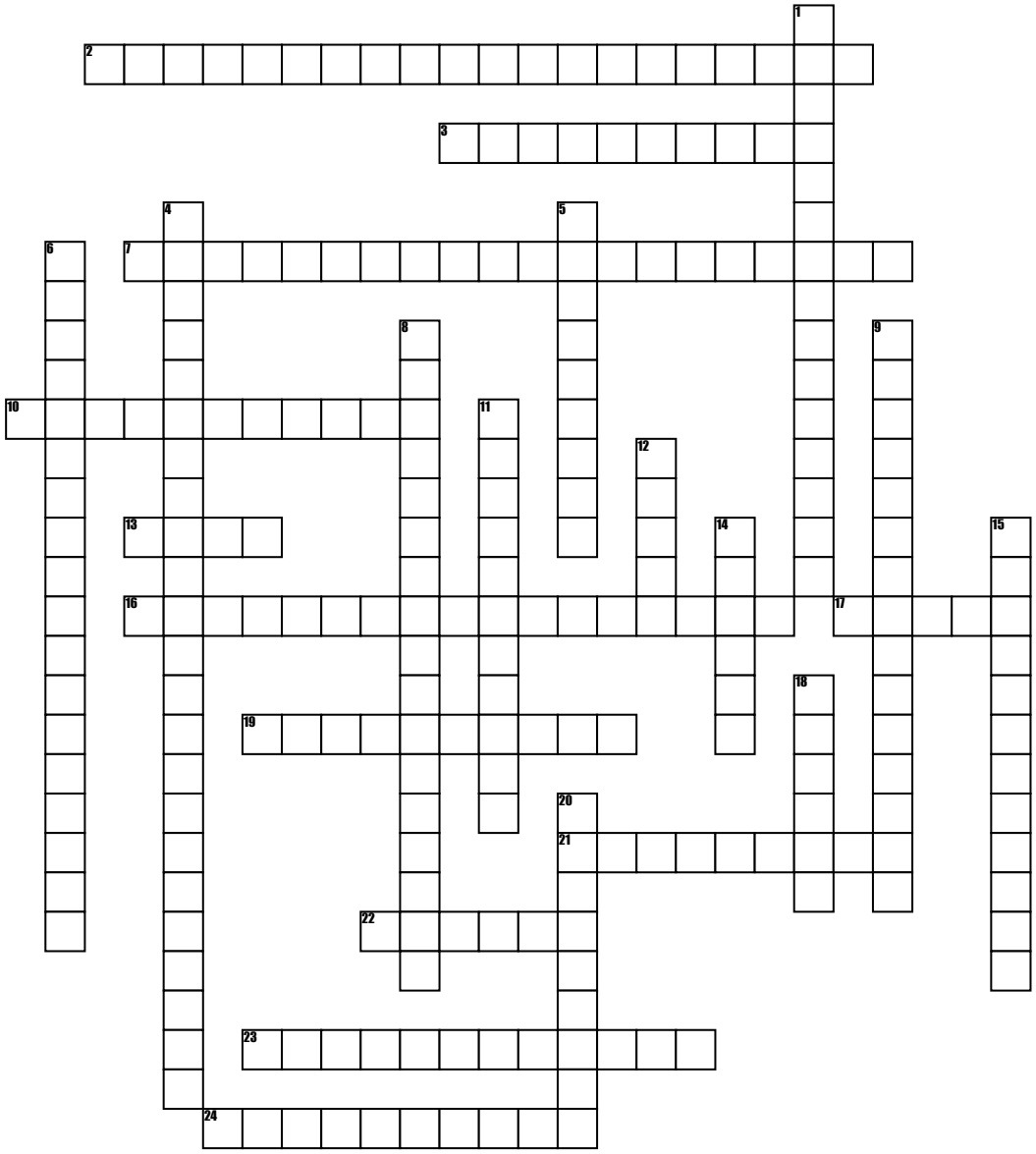
Name: _____ Date: _____

Intro To Waves



Across

2. waves that DO NOT require a medium to travel

3. the distance between 2 consecutive points on a wave

7. occurs naturally in sunlight and most of it is blocked by the ozone layer and it can be absorbed by the skinned is used in fluorescent light bulbs and tanning beds

10. when the crests of a longitudinal wave are close together

13. a traveling disturbance that carries energy from place to place

16. used in TV remotes to change channels, surveillance cameras, heat radiators, and satellite imaging

17. strong enough to penetrate deep into tissues and take images of teeth, bones, and other objects. It is also used in airport security and to inspect products, such as computer chips

19. movement that follows the same path repeatedly, and it gives waves their energy

21. the height of a wave from resting position

22. matter that mechanical waves travel through

23. move in circular motion, they are a combination of longitudinal and transverse waves

24. waves with lowest frequency and longest wavelength used to broadcast radio and television signals

Down

1. waves that require a medium to travel through

4. made up of transverse waves from radio waves to gamma rays, it is organized based on wavelength

5. the number of waves passing a point in a second measured in hertz (Hz)

6. used in cooking, radar systems, telephones, and other signals

8. move in and out as a series of compressions and rarefactions. They move parallel to the motion of the wave.

9. vibrates up and down or right to left. They move perpendicular to the motion of the medium.

11. when the crests of a longitudinal wave are spread far apart

12. highest point or peak of a transverse wave

14. lowest point or bottom of a transverse wave

15. only part of the spectrum that the human eye can see, and it contains the colors of the rainbow

18. empty space, also known as a place with no matter at all

20. waves with highest frequency and shortest wavelength. It is found in space, nuclear explosions, and lightning. It is used in medicine to kill cancer cells and to sterilize medical equipment