

Wave and Sound Vocab. and Short Answer

Optional Study Guide-NO WORD BANK Quiz on _____ Approx 50 pts

1. a transfer of energy from one point to another with no transfer of mass- _____
2. a wave in which the particles vibrate perpendicular to the direction of the motion of the wave- _____
3. a wave in which the particles vibrate in a direction parallel to the direction of motion of the wave- _____
4. the high point of a transverse wave- _____
5. the low point of a transverse wave- _____
6. the area of greater concentration in a longitudinal wave- _____
7. the area of lesser concentration in a longitudinal wave- _____
8. the measurement of the height of a transverse wave- _____
9. the unit for frequency- _____
10. the name of the letter for wavelength- _____
11. the distance from one part of a wave until it repeats- _____
12. the time it takes for one wave to pass a given point- _____
13. sounds that have a frequency of more than 20,000 Hz- _____
14. sound level is measured in these units- _____
15. a condition that occurs when the frequency of an applied force matches the natural frequency of an object- _____
16. radio waves travel at what speed? _____
17. the part of a standing wave where little or no vibrations occur- _____
18. the part of a standing wave where the maximum vibrations occur- _____
19. What 2 variables affect the speed of sound?- _____ & _____
20. FM stands for- _____
21. AM stands for - _____
22. the units FM radio stations are in- _____
23. the units AM radio stations are in- _____
24. the material through which a wave is traveling- _____
25. the approximate speed of sound in m/s- _____
26. humans can hear up to approximately this many Hertz- _____
27. the number of waves that pass a given point each second- _____
28. the frequency shift that is a result of motion between the source of waves and an observer _____
29. the famous bridge that collapsed due to the speed and frequency of the wind one day in 1940- _____
30. term for any object that is traveling faster than the speed of sound- _____
31. as you increase the frequency of a sound, the pitch of the sound _____
32. In the Doppler Effect equation, this is the variable for the speed of sound. _____
33. In the Doppler Effect equation, this is the variable for the speed of the source of the sound. _____
34. As the temperature increases, what happens to the speed of sound? _____
35. A wave pattern that results when two identical waves travel in opposite directions and interfere- _____
36. the loud noise made when objects travel faster than sound- _____
37. sounds from 20-20,000 Hz are known as this- _____
38. a place on a baseball bat that if you hit it a standing wave is created- _____
39. the equation for the speed of sound at any temperature- _____
40. sounds with frequencies that are less than 20 Hz- _____
41. Who first broke the sound barrier? _____
42. What does Mach 2 mean? _____
43. What is the approximate speed of sound in miles per hour? _____
44. the lowest frequency of vibration for a standing wave- _____
45. sounds travel faster in solids than in air because? _____
46. a sound wave is what type of wave? _____
47. the unit of wavelength is: _____
48. What travels faster, light or sound? _____
49. What other unit is the same as a Hertz? _____
50. List 1 example of resonance: _____
51. What unit is period measured in? _____