

Waves Unit Study Guide

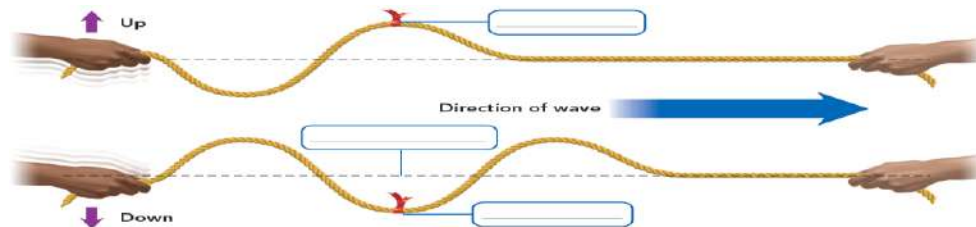
1. Mechanical waves are created when a source of energy causes a medium to _____.
2. The highest points of a transverse wave are called _____.
3. Electromagnetic waves can transfer energy without a _____.
4. Give two examples types of waves that require a medium. _____
5. Give two examples of types of waves that do not require a medium. _____
6. Part of a longitudinal wave where the particle are spread apart is called a _____.
7. What term describes the maximum distance that the particles of a wave's medium vibrate from their rest position? _____
8. What term describes the number of waves produced in a given amount of time? _____
9. What term describes the distance from any point on a wave to an identical point on the next wave? _____
10. What term describes the speed at which a wave travels through a medium? _____
11. What unit is used to describe the frequency of a wave? _____
12. What do you call a reflected sound wave? _____
13. The bending of waves due to a change in speed is called _____.
14. The bending of waves around the edge of a barrier is known as _____.
15. The interaction between two waves that meet is called _____.
16. What occurs when vibrations traveling through an object match the object's natural frequency? _____
17. The electromagnetic spectrum is divided into regions by what? _____
18. Light that has passed through a polarizing filter is called _____.
19. Why do you see lightning from a distant storm before you hear thunder? _____
20. The range of electromagnetic waves placed in a certain order is called the _____.
21. What type of wave has the lowest frequency? _____
22. What type of wave has the greatest energy? _____
23. Visible light has a higher frequency than _____.
24. The images made by an infrared camera are called _____.
25. Cell phone signals are transmitted by _____.

26. What EM waves are used in radar? _____
27. What EM waves are seen in a rainbow? _____
28. What EM waves are used to broadcast TV signals? _____
29. What EM waves make an object feel warmer? _____
30. What EM waves are used to treat some form of cancer? _____
31. What EM waves cause sunburns? _____
32. What EM waves are used as security devices in airports? _____
33. What EM waves does your skin need to produce vitamin D? _____
34. Global Positioning System signals can tell you _____.
35. For each cell, or geographical area, a cell phone system requires a _____.
36. Identify the name of the wave shown below: _____
37. What is the medium through which the wave is moving? _____

Label the parts of the wave.

Word Bank

Rest position, Crest, Trough

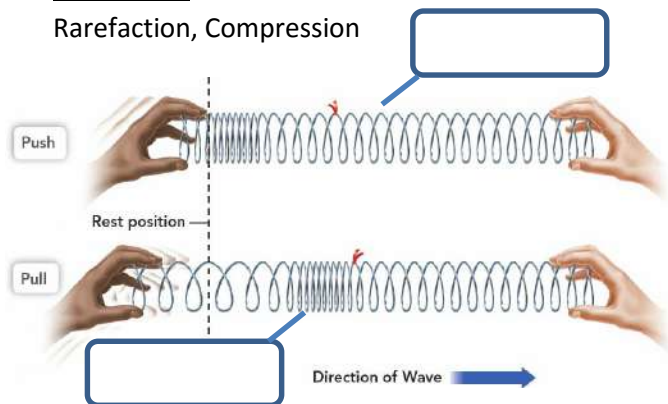


Identify the name of the wave shown below: _____

38. Label the parts of the wave.

Word Bank

Rarefaction, Compression



*There will also be an experiment question on the test so you should be able to identify the variables and the control.