

Name _____
Hour _____

Study Guide for Sound and Light Waves Test

1. What does a decibel measure?

2. The amplitude of a wave is the _____

3. A sound with a large amplitude will transmit a lot of _____.

4. Describe how sound travels in different mediums such as:
 Solid:
 Liquid:
 Gas:

5. Describe 3 characteristics of light waves.

6. Describe 3 characteristics of sound waves.

7. What are the colors of the visible spectrum?

8. When white light shines on film and violet light is transmitted through the film, the film _____ all the colors except _____ from the white light.

9. What material transmits the most visible light?

10. Which material reflects the most visible light?

11. Light that is refracted is re-directed through another _____.

12. Light is a _____ wave.

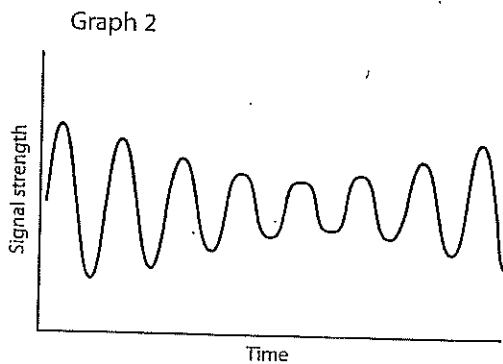
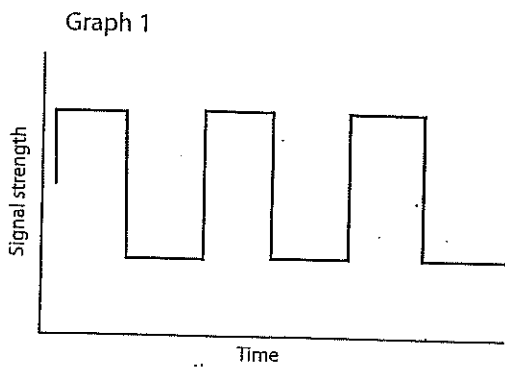
13. Frequency is the _____ of wave cycles in one second.

14. Describe one similarity and one difference between longitudinal wave and a transverse wave.

15. If the frequency of a sound increases, what happens to its wavelength?

16. Explain noise-induced hearing loss, and provide three ways a person can prevent it.

Use the following diagrams of a transmitted signal to answer questions 28-31.



17. Which diagram represents
a. a digital signal?

b. an analog signal?

18. Explain how the diagram models the differences in the signals. _____
