

Use the word bank on page 2 to complete the following sentences.

1. When the crest of one wave meets the trough of another wave, _____ occurs.
2. _____ occurs when waves are forced to move around an obstacle or through a narrow opening.
3. Refraction occurs when waves enter into a new medium at an angle and part of the wave begins to move _____.
4. _____ occurs when waves bounce off of a surface that they cannot pass through.
5. Sound travels _____ through warm air than it does through cold air.
6. The hammer, anvil, and stirrup make up the _____ ear.
7. The pitch of a car's horn will sound _____ as it drives toward you.
8. _____ is the physical response to the intensity of sound.
9. The _____ of a musical note is determined by the frequency of the sound waves.
10. A change in the frequency and wavelength of waves occurs when the source of the waves is moving. This is called the _____ effect.
11. A longer guitar string produces a _____ pitch.
12. The part of the ear that collects sound is called the _____ ear.
13. In class and in the lab we made the tuning forks sound louder by using _____ which causes the air column to produce standing waves that are the same as the tuning fork's.
14. Sound is recorded by changing sound waves into _____ signals.
15. In the _____ ear the vibrations of sound waves are converted to electric impulses which are sent to the brain.
16. The _____ of sound is much greater in water and metals than it is in air because the particles of the medium are much closer together.
17. When constructive interference occurs, the _____ increases.
18. The part of a standing wave which does not move is called the _____.
19. Sound waves above 20,000 Hz are called _____ because we cannot hear them.
20. The unit of sound intensity is the _____.

Word Bank for page 1

Decibel

Reflection

Faster

Ultrasound

Loudness

Middle

Slower

Amplitude

Higher

Inner

Speed

Diffraction

Outer

Lower

Node

Pitch

Destructive Interference

Resonance

Doppler

Electronic

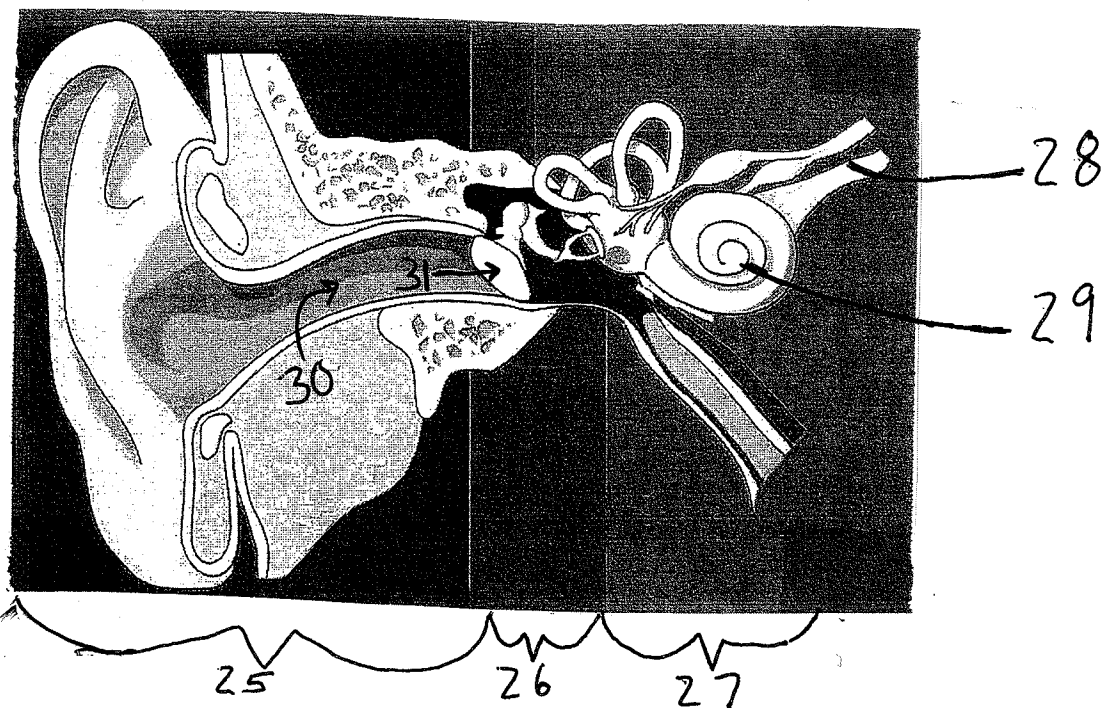
21. Which is faster, light or sound? Describe an example which shows the difference between their speeds.

22. Describe how we were able to calculate the speed of sound in the lab using tuning forks.

23. Describe how a musical instrument can produce high notes (pitches) and low notes (pitches) and give an example of this.

24. Explain why sound waves can diffract through the doorway but light waves cannot.

Give the name and the function of the parts of the ear labeled on the diagram.



Name

Function

25.	_____	_____

26.	_____	_____

27.	_____	_____

28.	_____	_____

29.	_____	_____

30.	_____	_____

31.	_____	_____
