

Name _____ Date _____ Bell _____

Unit 8: Lesson 1- What is Sound?

Vocabulary

1. wave (page 356)-

2. Volume (page 358)-

3. Pitch (page 358)-

4. Frequency (page 358)-



Waves of Sound Pages 356-357

1. What is wave?

2. What is sound energy?

3. What sets sound in motion? _____

4. What are vibrations?

5. What is a wavelength?

6. What is the crest of a sound wave?

7. What is the amplitude of a sound wave?

8. What is the trough of a sound wave?

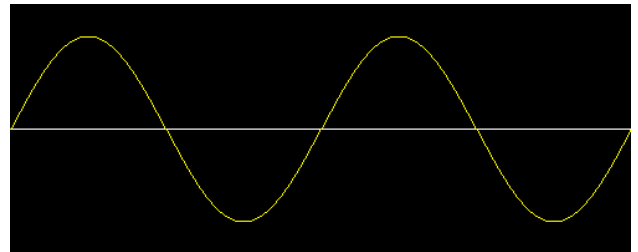
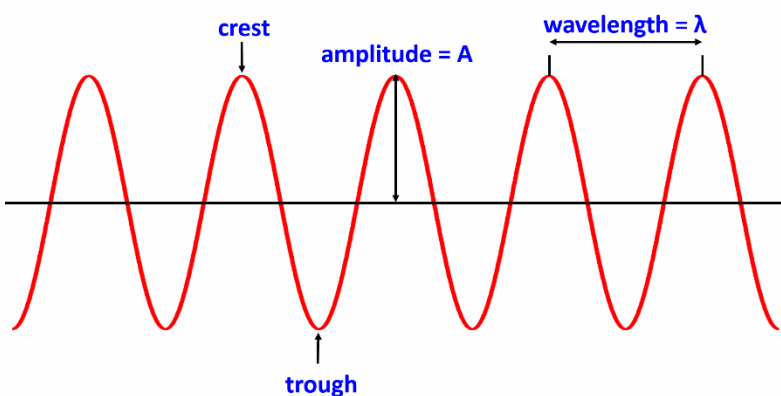
9. What is an example of something that makes a sound?

10. What type of waves carry sound energy forward? _____

11. What two actions make up compression wave?

12. How do vibrations from a guitar string get to your ear?

13. If a tree falls in the forest and no one is there, does it make a sound?



It Sounds Like... Pages 358-359

1. What are two useful ways to measure sound?

2. What is pitch?

3. What words do we use to identify the specific pitch of a sound?

4. What musical instrument would produce a high pitch sound?

5. What musical instrument would produce a low pitch sound?

6. What does frequency measure?

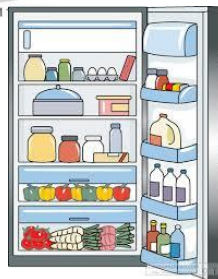
7. A sound with a high pitch has a _____
8. A sound with a low pitch has a _____
9. What is the connection between frequency and pitch?

10. What is volume?

11. What is another word for volume? _____
12. How is volume measured? _____
13. At what decibel is the softest sound a human can hear? _____
14. The humming of a refrigerator is what decibel? _____
15. At what decibel is the sound of heavy traffic? _____
16. At what decibel can cause hearing loss if a person listens for a long period of time?

17. What can you do to prevent hearing loss if you are going to be exposed to 15 minutes or more of noise at 100 decibels?

18. Why can dogs hear some sounds that you cannot hear?



The Travels of Sound Pages 360-361

19. How does sound travel?

20. What does sound need to travel from one place to another?

21. Most sound travels through what type of matter?

22. Sound can travel through which three types of matter?

23. What do gases, liquids, and solids have in common?

24. What would happen if there are no particles for sound to travel through?

25. If an astronaut dropped a heavy rock on the moon, would it produce a sound? Why or why not?

26. In what way are gases, liquids, and solids different, and how does the difference affect how sound moves through them?

27. Which type of matter does sound move the fastest? _____

28. Which type of matter does sound move the slowest? _____

29. A dog is barking. Would you hear the sound fastest through liquid water, ice, or water vapor? _____

30. Through which state of water would the sound travel the slowest? _____

31. What gets vibrated in gases, in liquids, and in solids by sound waves?



Sound Off! Pages 362-363

32. What are some things that sound enables you to do?

33. How are you able to hear and speak through a cell phone?

34. What is Sonar?

35. Could sonar be used to determine the distance from the moon? Why or why not?

36. What is echolocation?

37. What is a stethoscope used for?

38. What is an ultrasound?

39. Could you define sound energy as energy that only people can hear? Why or why not?

40. What kind of frequencies do you think toothbrushes that use sound waves to clean your teeth use? Why? (sonar, ultrasound, echolocation, stethoscopes)

41. How do you think the speed of a dolphin's echolocation and a bat's echolocation signals compare?

