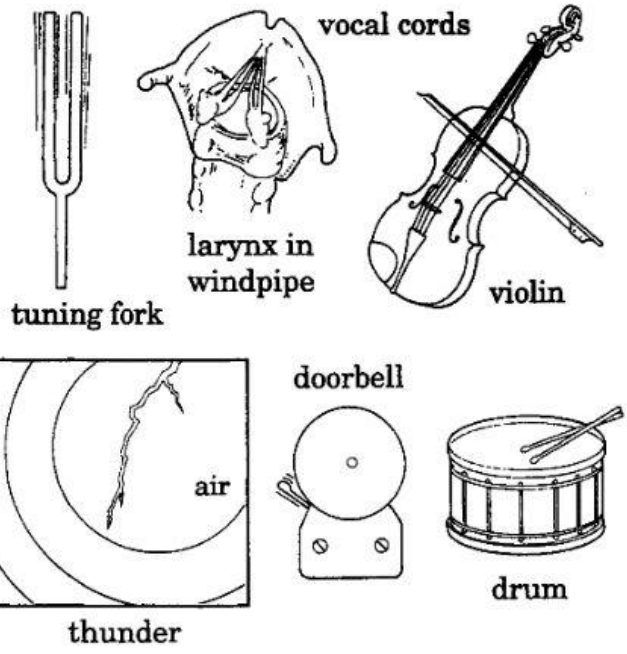
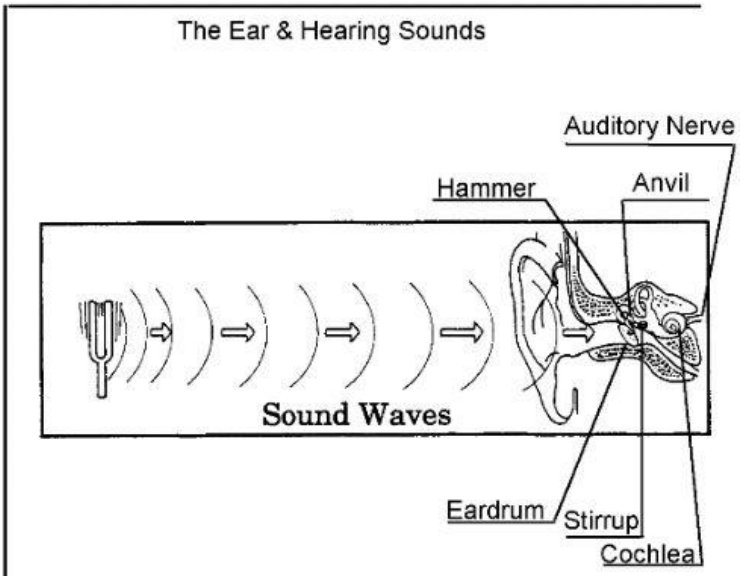
Sound

Sound waves are the result of vibrations.

1. **In each picture drag and drop an X on the part that vibrates to produce sound.**

X X X X X X





Sound hits the eardrum, then 3 tiny bones called the hammer, anvil and stirrup. Sound is then sent to the Cochlea and on to the auditory nerve and the brain.

2. Name the part on each object that vibrates to produce sound:
   a. church bell the _____
   b. radio the _____
   c. piano the _____
   d. wind chime the _____
   e. dog barking its _____
   f. guitar the _____

3. Write the word or words that will make each sentence a true statement.
   a. Sound waves are the result of _____ in the air or other media.
   b. An object will no longer produce sound waves when it has stopped _____.
   c. **Vibrating objects send out_____ or longitudinal waves that can travel through solids, liquids, or gases but not through a _____.**
   d. The vibrations of the eardrum cause tiny _____ in the inner ear to vibrate.
   e. The _____ nerve relates sensation to the brain, which interprets the stimulus.

4. **Describe how we hear sound from a ringing bell.** Sound from the bell travels to our ears in **compressional or longitudinal transverse** waves. Those waves hit the _____ which transfer it to three tiny _____ called the hammer, anvil and stirrup. The stirrup makes the Cochlea sense vibrations which are sent to the auditory nerve and on to your _____.

5. Which property of sound allows our brain to distinguish one sound from another?