The Ear and Sound
Chapter:12
Lesson:1 sound
Page: 139

1. Determine how many compressions can be seen in the wave in the figure?

   In looking at the figure, I have~~i have~~ determined that there are 3 compressions seen in the wave. pg.(140)

   Commented [1]: Please elaborate on how this answer was determined. What constitutes compressions in the figure?

   2.Explain what two things create a sound wave?

   As the molecules are pushed together, a region of compression is created. A region of rarefaction is formed when the molecules move inward.The two things that create a sound wave are, The Compressions and Rarefactions form a sound wave. (11) pg.(140)

   3, Use diagrams how many decibels is the sound level of a purring cat?

   The decibels of the sound level of a purring cat is 25. (15) A sound that is 20 db has 100 times more energy. pg.(141)

   4.Explain how are pitch and frequency related?

   Pitch relates to the frequency of the sound. Frequency of a sound is measured by the number of cycles the object causing the sound completes per second. The words pitch and frequency are often used to mean the same thing. (1 and 6) pg.(142)

   Commented [2]: This answer is not clear in terms of the question. This would be a better response: Pitch relates to the
   frequency of the sound. The pitch of a sound is how high
   or how low the sound is. The higher the pitch of a sound is,
   the higher the frequency of the sound. p. 142

   5. Compare which species in the table can hear the largest range of sounds?

   The species that can hear the largest range of sounds are, Bats,whales, porpoises, and dolphins detect high- frequency sound waves. pg.(142)