Sound — Section 3 — Music & Acoustics

<u>Directions:</u> Read pages 656-661 in red book. Write answers in complete sentences. Type it you want.

- 1. Define music and noise
- 2. What instrument do you play (or would be interested in playing)? What vibrates on that instrument to create the sound?
- 3. Concert halls have wonderful acoustics. Name 3 reasons why concert halls have good acoustics. It might be helpful to look at photos of concert halls compared to a photo of Dorton Arena.
- 4. Concerts are held in Dorton Arena during the State Fair. Dorton Arena has terrible acoustics. Name three things about this arena that might cause it to have poor acoustics.
- 5. What causes "dead spots" in places where music is played?
- 6. What might cause the music to sound too loud and distorted?

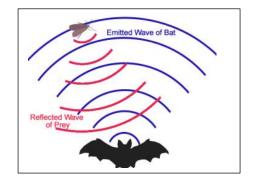
<u>Section 4 - How you Hear Sound & Hearing Loss--Read pages 662-667. Answer the questions in complete sentences.</u>

- 7. Read all of pages 662-663. Describe why hearing is like a chain reaction.
- 8. Name the parts of the ear that vibrate.
- 9. Name 4 specific things that can cause hearing loss.
- 10. Explain two ways you can protect yourself from hearing loss.
- 11. Name two things that people can do to try and restore some of their hearing.
- 12. What is noise pollution?
- 13. Name three sources of noise pollution.

<u>Section 5</u> - <u>Using Sound</u> - pages 668-671 (Answer in complete sentences!)

Read pages 668-671. Answer the following questions in complete sentences on notebook paper.

- 14. What is an ultra sound and name 3 animals that hear ultra sounds.
- 15. Explain how echolocation works.
- 16. Name 3 different animals that use echolocation and explain why they use echolocation.
- 17. What is sonar?
- 18. What do scientists use sonar for? Name 4 uses of sonar.
- 19. What is a sonogram?
- 20. Name 2 different ways that ultrasound imaging is used.



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