Sound Review:

1. Understand the superposition principle; both constructive interference and destructive interference.

2. What does it mean when waves are in phase?

3. What type of wave is sound?

- What do they consist of?

4. What are rarefactions?

5. What is a medium?

6. Is there sound in space?

7. What is frequency in sound?

-the higher the frequency the higher the \_\_\_\_\_\_\_\_\_\_\_\_

8.What is infrasonic sound?

-what is an example of infrasonic sound?

9.What is ultrasonic sound?

-what is an example of supersonic sound being used?

10.What is amplitude in sound?

11. How is amplitude measured?

12. What does an increase in 10 dB indicate?

-what does a decrease in 10 dB indicate?

13. What factors can change the speed of sound?

14. What does supersonic mean?

-How is it measured in planes?

15. What are beats caused by?

-what are the loud parts produced by?

-what are the soft parts produced by?

16. Be able to calculate the number of beats between two frequencies.

17. Calculate the Doppler Effect.

-when source is moving

-when observer is moving

-when both observer and source are moving.

18. What is timbre?

-how is timbre described?

19.What is an echo?

-how are echoes calculated?

-be able to calculate distance and time using the echo equation.

-what are some uses for echoes?

20.Why does air temperature affect the speed of sound?

21.Be able to calculate the speed of sound in different air temperatures.

22. Be able to calculate wavelength, frequency, and length of tube in close-end tubes.

23. Be able to calculate wavelength, frequency, and length of tube in open-end tubes.

24. Be able to calculate harmonics in both closed and open-end tubes.

25.How does the human ear work?

26.What is the threshold for human hearing in Hertz?

27. What is an octave?

-what is the octave frequency ratio?

-be able to calculate note frequencies between octaves. (example: C at 256 Hz. What is the (frequency of the C one octave higher?