Summary of sound

*For points 1-6, and other questions with a \* delete any wrong answer(s)*

1. Sound is a transverse\*/longitudinal wave\*.
2. Sound is caused by vibrations\*/an electric pulse\*.
3. Sound travels in a solid\*/ liquid\*/ gas\*/vacuum\* .
4. The frequency of a note indicates the pitch\*/volume\*.
5. The loudness of a note is given by its pitch\*/amplitude\*.
6. An oscilloscope can be used to record sounds, a loud note would have a high amplitude\*/no. of waves on the screen\*.
7. Sound travels at a speed of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in air.
8. Sound travels faster\*/slower\* in a solid than in air.
9. The range of human hearing is approximately \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. As you get older you lose the ability to hear loud\*/high pitched\* sounds.
11. Sound levels are recorded in Decibels (dB)\*/ Hertz (Hz)\*.
12. The sound level that can cause permanent damage to our hearing is \_\_\_\_\_\_\_ .
13. Above the sound level to cause permanent damage we should wear \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to protect our hearing.
14. The quietest sound level we can hear, which is called the Threshold of Hearing, is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
15. A normal conversation would have a sound level of about 10dB\* / 20dB\* / 60dB\*/100dB\*/ 140dB\*
16. We can use a curved reflector to collect more sound as the waves reflect\*/ refract\*/ diffract\* off the curved dish, collecting more signal.
17. If the following note is a “normal” note draw one that is quieter and higher pitched.
18. If the note below is a normal note draw one that is the same volume but lower pitched. 
19. When two notes are an octave apart the frequency of the lower note is higher\*/ double\*/ half\* that of the higher note.

*For questions 20 and 21 use the netbooks or books to find the answers.*

1. Sounds with a frequency above the upper range of human hearing are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. High frequency sounds are used to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

*Add on the bottom of this sheet any other important point you have learnt about sound.*