



## Summer Homework - Music Technology

Your opening unit will be 327 Understanding Recording Techniques. You need to demonstrate your knowledge and understanding in an essay, supplemented with diagrams where appropriate:

**1.1 Discuss the basic physics of sound, making reference to waveform and frequency and define the frequency range of at least five musical instruments (including the human voice) (approx. 400 words)**

The more comprehensively you address the criteria, the more likely you will get a distinction! You must write it in your own words, tailored for readers with no prior knowledge.

**Key areas to consider: What is sound? How does sound function? State and explain the ways in which sound is measured. State the frequency range of five musical instruments.**

Extension: Research and describe/explain the harmonic series. What is it? How does it relate to the timbre of different instruments?

For those who would like to explore further:

<https://www.youtube.com/watch?v=24yESm63tSY>  
- Physics of Sound

<https://www.scienceworld.ca/resource/sound/> - Sound (Science World)

<https://www.zytrax.com/tech/audio/audio.html> - [Instrument Frequency Ranges](#)

<https://www.youtube.com/watch?v=OATjHiOuc70> - [Harmonic Series Explained](#)

<https://www.youtube.com/c/AudioUniversity> - [Excellent channel, you MUST subscribe!!!](#)