

## **What to expect: Sound Intensity and Quality**

Sound is a wave. Waves carry energy. Thus we need to learn about the energy a sound wave carries, and how that is related to the intensity of sound.

You will learn how sound intensity is measured, and the Decibels (db) scale which you probably know from the specs that are given when you buy speakers. However, working with this scale is often perceived as quite difficult, and you will need to practice it.

The sounds we hear are usually not pure waves but almost always superpositions of different sound waves. How we perceive a sound (noise or melodic for example) depends on the superpositions of the different sound waves. You will learn about the physics phenomena of the superposition of sound waves.

You will also learn about the effect of the moving siren, which in physics is called the Doppler Effect.