

Scientist





[Evelyn Glennie](#)
(Deaf percussionist)



[Karrie Keyes](#)
(Audio engineer)

Skills

I'm identifying differences and similarities like an audiologist. 

I'm using scientific enquiries to answer questions like a sound engineer. 

Careers

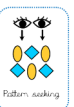
Audiologist (studies sound and its properties)
Sound engineer (deals with sound for broadcasts or musical performances)

Enquiries



How does the volume of a drum change as you move further away from it?

When is our classroom the quietest?

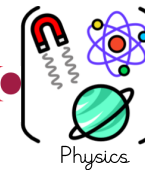


Is there a link between how loud it is in school and the time of day? If there is a pattern, is it the same in every area of the school?

How would you group these items/instruments, based on what kinds of sound they make?



How has the hearing aid changed over time? [See history here](#)



Pupils will learn about how sound is made, and how it is heard. Sound is an energy, and it is created by vibrations. It travels through the air as soundwaves, and the bigger the vibration, the louder the sound. There is no sound in space!



What you should already know

Sound can be described as loud or quiet, and this is called volume. Pitch of a sound refers to whether it is higher, or lower. Loud sounds can damage our eardrums, the part of our body that enables us to hear. Some people are deaf and cannot hear at all, or not fully, and can communicate through sign language instead.

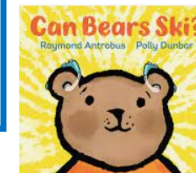
What comes next?

KS3 Physics - children will learn about sound waves including frequencies, echoes, reflection and absorption of sound.

Key vocabulary

Sound	Amplitude
Eardrum	Loud
Vibrations	Faint
Soundwaves	
Volume	
Pitch	
Insulation	

Literacy Link



Can Bears Ski?
Raymond Antrobus & Polly Dunbar

Key Learning

- Know how sound travels from the source to the ears.
- Know to associate sound with vibration.
- Know the correlation between pitch and the object producing a sound.
- Know the correlation between the volume of a sound and the strength of the vibrations that produced it.
- Know what happens to a sound as it travels away from its source.

Year 4: Sound



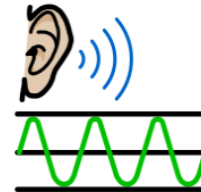
Sound: a type of energy made by vibrations, that can be heard



Eardrum: a part of your ear that vibrates so that you can hear sound



Vibrations: the shaking back and forth of something. In the case of sound, it is the air that vibrates



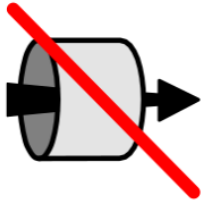
Soundwaves: sound travels through the air as vibrations called soundwaves



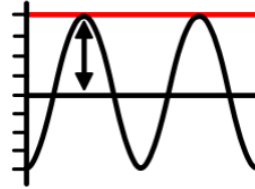
Volume: how loud or quiet a sound is



Pitch: how high or low a sound is



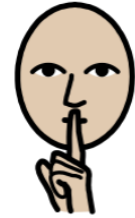
Insulation: something that stops sound, or lessens it



Amplitude: the size of a vibration. E.g. The larger the amplitude, the louder the sound



Loud: when the volume of a sound is high



Faint: when the volume of a sound is low

Year 4: Sound



Sound



Eardrum



Vibrations



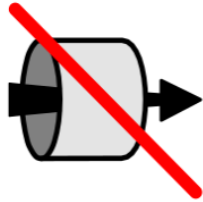
Soundwaves



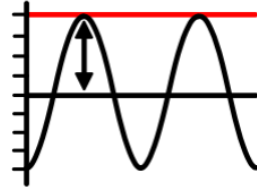
Volume



Pitch



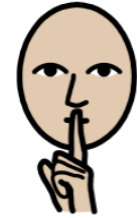
Insulation



Amplitude



Loud



Faint