

# Sound Innovation

## Prior Knowledge

Year 4 Science: States of matter. Which states of matter will sound travel through?

Year 3 D&T: Making a musical instrument.

Year 3: Light travels in waves from a source to our eyes.

Year 1 : Animals including humans. Humans have 5 senses including hearing.

KS1 and KS2 music: Pitch and dynamics of music.

## Future knowledge

Year 5: Animals including humans. Describe changes as humans develop to old age.

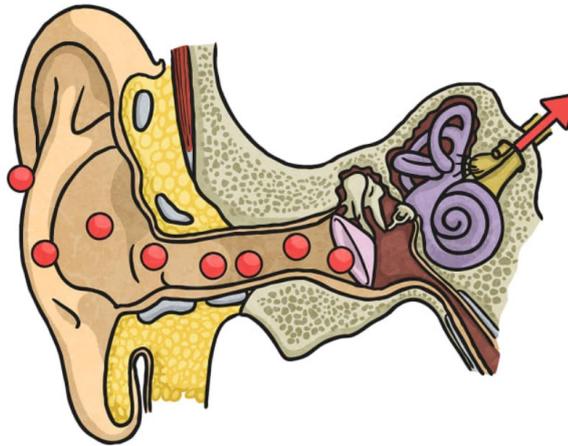
Year 5 : Music—Ukulele pitch and dynamics.

Year 6: Music—Djembe pitch and dynamics.

Year 6: Light. Light travels in waves and reflects off objects to reach our eyes.

How can the volume of an instrument be changed?

Can you draw a soundwave with a different pitch and volume?



## My Component Knowledge:

Lesson 1: I can explain which states of matter sound can travel through.

Lesson 2: I can identify how sounds are made, associating some of them with something vibrating.

Lesson 3: I can find patterns between the volume of a sound and the strength of the vibrations that produced it.

Lesson 4: I can explain that the shape and size of an ear has an impact on how sounds are heard.

Lesson 5: I can investigate how well sound travels through different materials.

Lesson 6: I can explain how sound travels from an instrument to our ears.

## My Composite Knowledge:

I understand that sound is caused by vibrations which can travel through all states of matter.

## My Powerful Knowledge:

I know that all sounds are produced by vibrations that are eventually processed by our brains as recognisable sounds. I can explain how to alter the sound that a musical instrument makes and also draw soundwaves to show this.

## Key Vocabulary

**Tier 1:** Loud, quiet, soft, noise, sound, high, low

**Tier 2:** Pitch, muffle, vibration, tuning, tension, tight, sound waves

**Tier 3:** Amplitude, decibel, frequency

