

# Science

All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.



## Sound

Summer 1

### New Knowledge:

- Sound is made when something vibrates e.g. strings on a guitar, skin on a drum, vocal chords.
- Sound travels through a medium by causing molecules to vibrate and knock into each other sending the sound along (like a Mexican wave). Air does not move with the sound.
- A sound produces vibrations which travel through a medium from the source to our ears
- The vibrations cause parts of our body inside our ears to vibrate, allowing us to hear (sense) the sound.
- Sound can travel through a solid, liquid and a gas.
- Sound travels best through solids, followed by liquids and then air because the molecules are closer together in a solid.
- Pitch is the highness or lowness of a sound and is affected by features of objects producing the sound e.g. smaller objects usually produce higher pitched sounds.
- The loudness (volume) of the sound depends on the strength (size) of vibrations which decreases as they travel through the medium.
- Sounds decrease in volume as you move away from the source.
- A sound insulator is a material which blocks sound effectively.

### Key Vocabulary:

- Source
- Vibrate
- Vibration
- Pitch (low, high)
- Volume
- Faint
- Loud
- Insulation
- Vacuum
- Ear canal
- Ear drum
- Anvil and hammer bones
- Stirrup bone
- Cochlea
- Auditory nerve
- Brain

