Leamington Primary Science Knowledge Organiser Year 4 – Sound – Physics

Pitch – What caused that 'racket'?

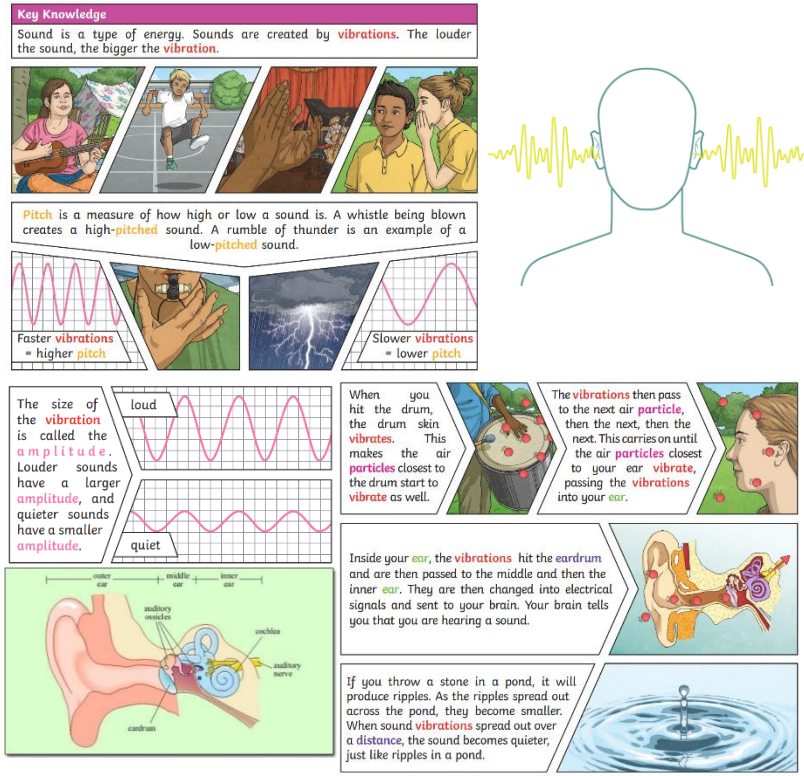
What I should already know

- That we use our ears to hear sounds
- That sounds can come from number of sources
- That speech is a type of sound.

Interesting Facts

- Dogs can hear sound at a higher frequency than humans, allowing them to hear noises that we can't.
- The speed of sound is around 767 miles per hour
- When traveling through water, sound moves around four times faster than when it travels through air.

What I will learn



Important words to help me. (vocabulary)

Vibration	A movement backwards and forwards.
Sound wave	Vibrations travelling from a sound source.
Amplitude	The size of the vibration. The larger the amplitude = the louder the sound.
Pitch	How high or low a sound is.
Ear	An organ used for hearing.
Insulation	A material that prevents sound from travelling as far.
Soundproof	To prevent sound from passing.
Absorb	To take in sound energy. Absorbent materials have the effect of muffling sound.
Vacuum	A space where there is nothing. There are no particles in a vacuum.
Eardrum	A part of the ear that is a thin, though layer of tissue that is stretched out like a drum skin. It separates the outer ear from the middle and inner ear. Soundwaves make the eardrum vibrate.
Volume	The loudness of a sound.
Sound source	Where a sound originates from.
Percussion	Instruments that are unable to change pitch.
Tune	A melody made by musical instruments.
Tuned instrument	Instruments that can change in pitch and volume.

Ideas for Scientific Enquiry

- Set up an experiment to find out who has the best hearing in your household. Hypothesise why you think this is.
- Make your own tuned musical instrument from recycled materials. Can you change the volume and the pitch?

- Survey when your street/ house is the nosiest time of day. What noises can you hear? When? Why do you think some times of day are louder/ quieter than others?