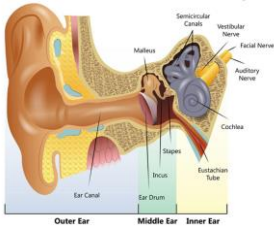


Year 4: What's That Sound? Knowledge Mat

Subject Specific Vocabulary		Working Scientifically	By the end of this unit, I will know:
sound	Sound is an energy that is made by vibrations, even when you can't see them. It is something you hear.	<ul style="list-style-type: none"> ❑ Asking relevant questions and using different types of scientific enquiries to answer them ❑ Setting up simple practical enquiries, comparative and fair tests ❑ Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions ❑ Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions ❑ Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions ❑ Using straightforward scientific evidence to answer questions or support their findings 	Sound is made by vibrations which travel through the air and are detected by our ears. Our ears turns the vibrations into signals to the brain, which then 'hears' the sounds.
noise	A noise is an unpleasant or unexpected sound. You could say that machinery makes a noise.		The loudness (volume) of a sound depends on the size of the vibration: the bigger the vibration, the louder the sound.
vibration	When any sort of object vibrates, it causes air particles to move. These vibrations enter your ear and you hear them as sounds.		Pitch refers to how high or low a sound is. A high-pitched sound has a high frequency. A low-pitched sound has a low frequency. Frequency is the number of vibrations per second.
sound source	The object that produces the sound vibrations. They can be natural or man-made.		The further away from the sound source, the quieter the sound appears.
medium	A medium is any substance through which the waves can travel. Sound waves may travel through many mediums. These include air, water, and solid objects. Sound waves pass through mediums in all directions.		Sounds cannot be made in a vacuum – the vibrations need a medium to travel through. There is no sound in space.
volume	Volume is the perception of loudness from the intensity of a sound wave. The higher the intensity of a sound, the louder it is perceived in our ears, and the higher volume it has.		Too much sound can damage our ears, including listening to loud music on headphones.
pitch	A high sound has a high pitch and a low sound has a low pitch. A tight drum skin gives a higher pitched sound than a loose drum skin.		Our famous scientist for the term is: Heinrich Hertz
frequency	Frequency is measured as the number of wave cycles that occur in one second.		
insulation	Protecting something by surrounding it with material that reduces or prevents the transmission of sound.		

