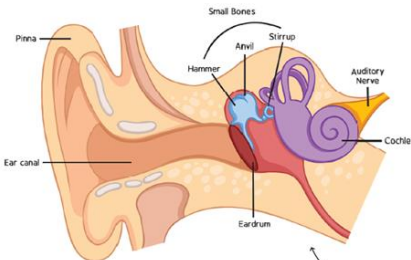
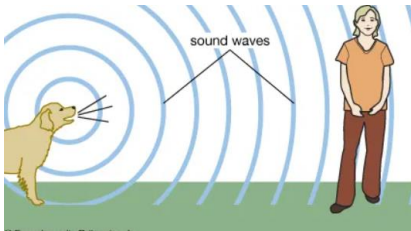
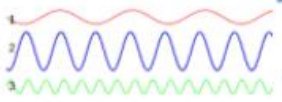


What do we know already:	Vocabulary:		
*I know the main parts of the human body. *I know the 5 senses and how they are associated with the main parts of the body.	Tier 1	Tier 2	Tier 3
What's next:	Ear Sound Source	Amplitude Decibel Frequency Medium Pitch Sound waves Vibration Volume	Insulation - material that stops the travel of energy (including sound)
			Transmit - to pass from one place or person to another.
			Trough - the bottom of a sound wave.
			Vacuum - no sound can be heard in a vacuum because all the air particles have been removed.

How is sound made?	What are vibrations?	How does sound travel?	How do we measure sound?	How does sound change?
• Sound is made by air molecules vibrating. • When vibrations are made (e.g. when you clap your hands) the air around the object vibrates. This is the air molecules vibrating. • The vibrations pass on from air particle to air particle until the ones near your ear vibrate. • When air molecules inside the ear vibrate, they shake tiny hairs on the insides of the ears. The hairs are connected to nerves under the skin. These nerves send messages to your brain to tell you that you heard a noise. 	<u>VIBRATIONS</u> Sound is made when an object vibrates and therefore causes the air around it to vibrate too. These vibrations are carried to your ear for you to hear them.  Sound vibrations can travel through different materials: SOLIDS: metals, stone, wood LIQUIDS: water GASES: air Sound travels better through some materials than others. It travels very well through metal pipes for example. The louder the volume, the bigger the vibrations. The size of the vibration is called the <i>amplitude</i>. Quieter volumes have smaller amplitudes and louder sounds have larger amplitudes.  Sounds travel in a <i>wave</i>. The vibrations make <i>air particles</i> closest to the object vibrate, which then passes the vibrations to the particle next to it and so on - like dominoes falling! 	Sound waves travel through a medium - such as air, water, glass, stone, and brick. 	*Amplitude measures how strong a sound wave is. *Decibels measure how loud a sound is. *Frequency measures the number of times per second that the sound wave cycles.	Pitch: • High pitch sounds are created by short sound waves. • Low pitched sounds are created by long sound waves.  long sound waves create a low pitch short sound waves create a high pitch Volume: • The closer you are to the source of the sound, the louder the sound will be. • The further away you are from the source of the sound, the quieter the sound will be. 