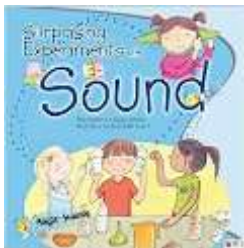




Science -Year 4 – spring 2 – Sound

Vocabulary	Meaning
buzzer	A device used to make a buzzing sound.
distance	A measurement of length to describe how far it is to a place or thing.
glockenspiel	A musical instrument with keys that you tap with a beater to make sounds.
instrument	An object that is used to create music.
pitch	How high or low a sound is.
sound	A noise produced by vibrating air.
thickness	Used to describe the width of the strings on an instrument.
tightness	Used to describe how much tension (how tight) the strings on an instrument have.
vibrate	Particles moving together and bumping into each other.
vibrations	Repeated waves of a vibration.
volume	A measurement of how loud or quiet a sound is.
xylophone	An instrument with keys that makes sounds when it is hit with a beater.

Skills	Books
- To be able to draw diagrams to represent sound waves. - To compare pitch and volume of sounds. - To draw graphs to show how distance effects sound. - To explain how sound travels through the air and other materials.	

Knowledge	
- Sounds can be of different pitch and volumes. - A sound travels through air in sound waves. - Sound waves cannot be seen but cause vibrations in materials. - Instruments work because of vibrating air.	
	

What I should be able to do and know now.	Growth Mindset Strategies	What I will know and be able to do at the end of the topic.
Knowledge: • To know that sounds are noises. • To know that sounds travel through air. • To know that our ears help us to hear sounds. • To know that we cannot see sounds but we listen to them. • To know that sounds can be quiet or loud. Skills: • Make different sounds using the notes of an instrument. • Draw a diagram of an instrument and label it. • Explain what sound is and give examples of things that make loud sounds and things that make quiet sounds.	If I find something challenging I can: Look back at the information I have been given. Ask a friend if they can help me. Use a diagram or text book. Look at the example the teacher gave me. Use an I-pad to research. What I will be learning • To find out that sounds are made when objects and materials vibrate. • To investigate whether sounds can travel through different materials. • To explore the relationship between distance and volume. • That some materials are effective in preventing vibrations from sound sources reaching the ear. • To investigate how sounds can be different pitches and volumes. • To find out how the length, thickness and tightness of a string affects its pitch. • To find out how sounds can be made by air vibrating and how to change the pitch of notes produced by vibrating air.	Knowledge: Can you explain how sounds are made? What causes sounds? When the p_____ in an object v_____ it causes the a_____ to v_____ which passes on the sound w_____. Pitch is how _____ or _____ a sound is. Volume is how _____ or _____ a sound is. Pitch can be affected by the _____, _____ or _____ of a string. Can you explain how you would test materials to see if they allow sound to pass through? How would you make it a fair test? Skills: Draw a diagram showing sound waves and how they travel. Create a graph to show how distance effects volume. Explain how pitch can be changed and describe an experiment to test this. Use instruments to make sounds with different volumes and pitches.