Listen up

Science sound topic

Session 5

LI: To understand how the strength of vibration effects the volume of sound.

We measure sound in decibels this measures the strength or intensity of the vibration.

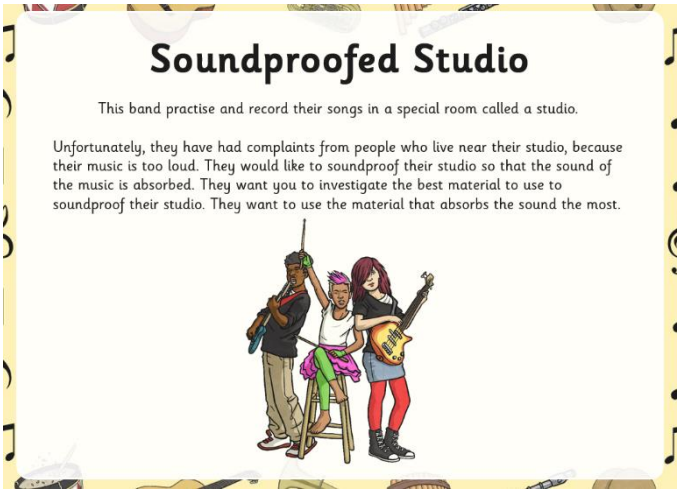
The stronger the vibration that is created for example, the harder you hit a drum the louder it will be furthermore, the weaker the vibrations the quieter a sound will be for example, if you gently tap a drum.

It's very important that you do not expose your ears regularly to loud volumes as this can damage the little hairs in the cochlea and over time they will become damaged and will begin to not work as well. This is why you might have to talk up a bit when speaking to your grandparents.

[Click here](#) to learn about how the size of vibration affects volume.

Today we would like you to have a go at the activity below.

To see if you can absorb some of those vibrations and muffle the sound.



Use materials that you would find around your house and investigate which ones would muffle the sound successfully.

This is your investigation so you can use which ever method you want to test it but don't forget to get it a fair test.

Type of Material	Loudness of Sound

Sound Proofing Investigation - What is the best material to muffle a sound?

Equipment needed	
Method (how will we investigate the question). Draw a picture and write a brief explanation.	
These factors will be kept the same (fair test)	
Prediction (which material do you think will be the best? Why?)	
Results (include a copy of your results table on the back of this sheet)	We found that the_____was the best at muffling the sound. We found that the _____was the worst at muffling the sound.
Evaluation	If I did this investigation again I would
Conclusion	I think the most effect sound proofing material _____ because