

Starters for Science are 4 activities that parents can use at home to help children develop their science alongside the key learning and vocabulary children are using at school. The activities are easy to resource and provide children with the stimulus to learn and talk about their science topic. Encourage children to use the correct vocabulary as they talk about what they are doing and finding out. Don't forget to share your work on social media

#ScienceFromHome

Key Learning:

Sound is caused by vibrations, which travel through the air to our ears.

Vibrations can also travel through solids and liquids, e.g. metal and water.

Sounds get fainter as the distance from the sound source increases.

Sound can be muffled by different materials.

Pitch is how high or low a sound is.

In a wind instrument high pitched sounds are created when sound travels through a short distance and low pitched sounds are created when there is a longer air column for the sound to travel.

Vocabulary:

vibration

solid

liquid

gas

pitch

high pitch

low pitch

volume

column of air

volume of water

muffle

Please be quiet!

Find something that makes a loud noise, like an alarm clock, or a noisy toy. Set it down at one end of a room and walk away from it. What happens to the sound the further away you walk? Can you think of a way of making the sound quieter?

<https://www.stem.org.uk/rx34kw>

Good vibrations

Cut a piece of thread, make sure it is a bit longer than your arm. Tie the middle of it around the handle of a fork. Wind each end of the thread around one finger on each of your hands, so you are holding the thread, with the fork dangling down. Place your fingers just near your ears, but not inside them!. Knock the fork gently against a table. What can you hear?

Making music

How does a kazoo work? Have a go at building one and find out. Take a cardboard tube and cover the end with greaseproof paper held on with an elastic band. Make a hole in the tube close to the elastic band. Now hum down the tube from the open end. What can you hear? What is making the sound?

<https://www.stem.org.uk/rxwvv>

Super sounds

Take two empty glass bottles or wine glasses. Fill them with different amounts of water. Tap the outside with a wooden spoon. Can you hear a difference in sound? Which one has a higher pitch? Try adding different amounts of liquid and see how the pitch changes.