

Water Xylophone

You will need:

- Glass jars or bottles
- Water
- Measuring jug
- Metal or wooden spoon
- Food colouring optional!



1. Carefully measure different quantities of water and pour them into each jar or bottle. The amount will depend on how many you have and their size but make sure each has slightly more than the last. Experiment with this as much as you like!
2. If you want to, at this point add food colouring.
3. Use your spoon to play your xylophone. Experiment with how hard to beat the glass (safely) to get the best sound.

Pitch = how high or low a sound is

THE SCIENCE

Sound waves can travel through water and when the amount of water in a container changes, the sound you hear changes as well. When you tap each glass, the sound you hear starts out as a vibration of the glass and quickly transfers to vibrating through the water inside the glass as well. The glass with more water has more for the sound to travel through, causing the vibrations to become larger and produce a sound with a lower pitch. The glass with the least amount of water has shorter vibrations and creates a sound with a higher pitch.



@MrsBpriSTEM