

Awe and Wonder

Water Bottle Chimes

You will need:



6-8 tall glasses or glass bottles

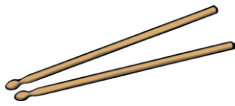


Coloured water



Several spoons

Wooden drum sticks



Felt beaters



Jugs for pouring



Method:



1. Set up the glasses in a row.
2. Play a glass with each different type of beater, how does it sound?
3. Pour a small amount of water into a glass, play with the beaters again, how does it sound?
4. Put water in all the glasses, a little more than the one before.
5. Play the glasses gently using your favourite sounding beater.
6. How do the sounds change?
7. Which makes a low sound? Which makes a high sound?

The Science

The more water in the bottle, the lower the sound will be when played. This is because the sound vibrations you can hear come from the bottle, as you add water it takes on a greater vibrating mass. If there is less water in the bottle there is less weight that vibrates and the pitch is higher.

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