

DO TRY THIS AT HOME

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Featuring: **Marvin and Milo**

What you need: • Two glass bottles • A wooden spoon • A jug of water • Good ears

This is much more fun than sorting out the recycling, Milo!

Fill one bottle $\frac{3}{4}$ full of water...

... and the other $\frac{1}{4}$ full of water.

Tap both bottles and listen to the sound they make. Which one is higher pitched?

Now blow across the top of each bottle. Which bottle makes the higher pitched sound now?

The easier it is for the glass to vibrate when you tap it, the higher the frequency. So the bottle with less water in will sound higher pitched. The less air there is in the bottle when you blow over it, the faster it vibrates. So the bottle with more water in will sound higher pitched.

Vic Le Billon