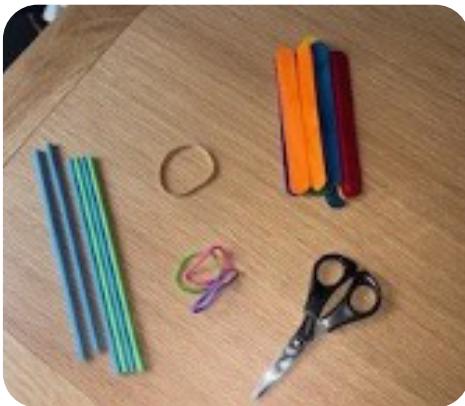


You can do a home-made Kazoo!

You can annoy your family and friends and have the excuse 'but it's for science'.

You will need

- 2 big lolly sticks 15cm long 2cm wide. Any colour will do.
- 1 drinking straw (strong paper or plastic)
- 1 thick rubber band 88.9 x 6.3mm - number 64 size is ideal
- 2 small rubber bands 31.75mm x 1.6mm number 10 size is ideal – a smaller or slightly larger one will be fine as you can just wrap it around a few more times.
- Scissors



What to do to make a Kazoo for you

1. Stretch the thick rubber band along the entire length of one of the lolly sticks



2. Cut two lengths of the straw – about 4 or 5 cm each, then place one piece of straw UNDERNEATH the rubber band at one end of the lolly stick



3. Place the other lolly stick on top of this and secure it tightly at outer side of the straw end with a smaller rubber band. You want it to be able to bounce open and closed like a quacking duck!



4. At the opposite end of the lolly stick, place the other piece of straw OVER the thick rubber band.



5. Then secure tightly at that end with a smaller rubber band – make sure to secure it on the outer side of the straw. Securing it on the outside of the straw means you can slide the straws along the lolly stick easily.



6. Now blow!



- Try sliding the straws up and down the lolly stick and see what different tones you get.
- Try humming a tune into the kazoo.
- Try squeezing the lolly sticks closer together as you blow –how does this change the sound?

The science part – good vibrations!

Sound is produced when materials vibrate. In this case, the stretched rubber band vibrates as we blow over it, and that vibration produces soundwaves. Moving the straw pieces closer together or farther apart changes the tension on the rubber band, which also changes the pitch.

