



Science by ME

The Buzzing Balloon

How is sound made and how can we annoy our parents by making lots of buzzing noises? Why not see what Daisy can do to make a buzzing sound [[Daisy and the bee!](#)].

You will need:

1 x balloon [round and about 30cm's]

1 x hex nut [six sided nut from the toolbox]



What to do:

Place the hex nut inside the balloon.

Blow up the balloon. To be safe, make sure you point the balloon to the ground at all times so the hex nut* stays at the bottom of the balloon. When the balloon is blown up, tie it off with a knot.

Hold the top of the balloon with one hand and gently start to 'swirl' the balloon in a circle. Once the nut starts to roll around the inside of the balloon you can start going faster.

What can you hear?

That buzzing sound is the sound of the nut gently bouncing off the sides of the balloon [because of its bumpy shape] and making 'vibrations' on the balloon.

What about the Science?

Sound is made by vibrations. The hex nut is bouncing off the side of the balloon, making the balloon 'vibrate'.

Those vibrations are then travelling through the air and landing on your ear! That's how you can hear the buzzing balloon.

But you can experiment further.

What would happen if the balloon was bigger or smaller? What else could you roll inside the balloon that would make vibrations and sound? What if your hex nut was bigger?

Have fun doing your science at home.

David
Museum Express
Newcastle Museum

* [Warning: Choking Hazard]

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Science by ME has been developed by Museum Express as part of its commitment to inspiring young people with science.

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