

**DO TRY THIS AT HOME**

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Featuring: **Marvin and Milo**

**What you need:**

- Piece of tissue 20 cm square
- Kitchen roll tube
- Sand
- A stick, e.g. dowel rod
- Rubber band

Hey Milo - do you know how strong that sand is?

Cover one end of the cardboard tube with the tissue paper.

Hold it in place tightly with the rubber band.

Poke through the tissue with the rod - it will tear.

Start again with a new piece of tissue and fill the tube 3/4 full with sand\*

\*Salt also works well

Try poking the rod through again. The rod just won't tear through the paper!

As you push the rod, the grains of sand are pushed away from it in all directions so that the entire force doesn't push down on the tissue. The sand also forms "arches" that help direct the force against the sides of the tube.

Vic Le Billon