

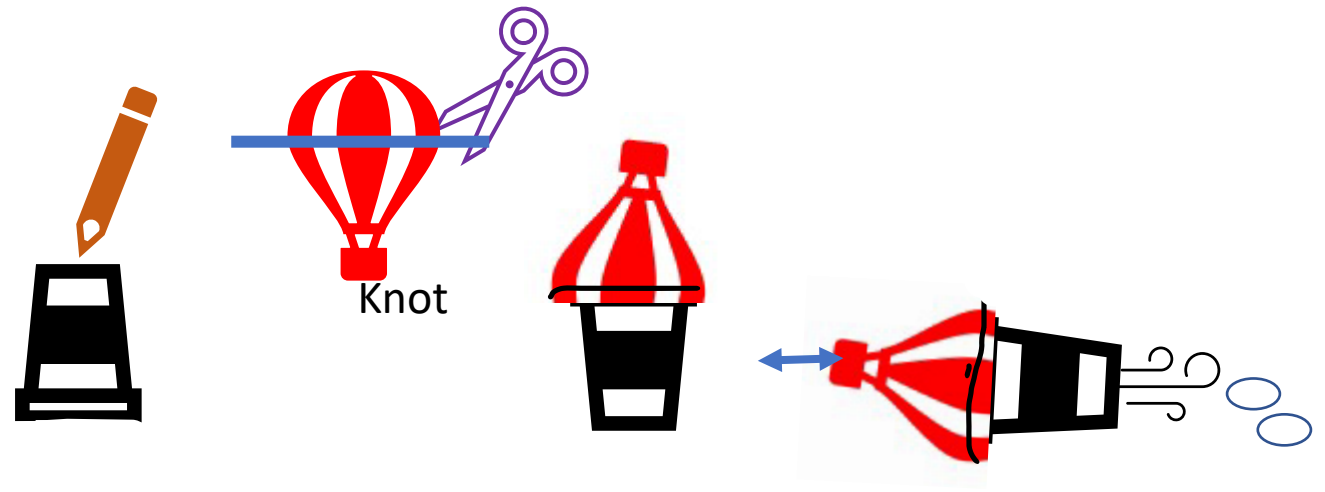
# Vortex Cannon

## What you need:

- Stiff paper/cardboard cup
- Sharp pencil
- Balloon
- Scissors
- Tape
- Cotton wool balls

## What you do:

- Make a hole in the middle of the base of the cup by forcing the sharp point of the pencil through it.
- Cut off the top 1/3<sup>rd</sup> of the balloon and tie a knot in the other end to seal it.
- Stretch the cut end of the balloon over the rim of the cup and seal in place with tape.
- Put the cotton wool balls on a surface, place the cup so the hole is next to these, pull back on balloon (use the knot) and let the balloon go.



## The Science

**The air-vortex cannon works by quickly applying force to the air molecules inside the cup. When the balloon surface snaps forward it collides directly with the air molecules inside the cup pushing and accelerating them toward the hole at the end of the cup. This moving air blows the light cotton wool balls away.**

