

The Power of Pressure

Here are two activities to demonstrate the “POWER” of air pressure.

SCIENCE
WEEK

9-16 NOVEMBER 2014

THE
POWER
OF SCIENCE

THE BALLOON ROCKET

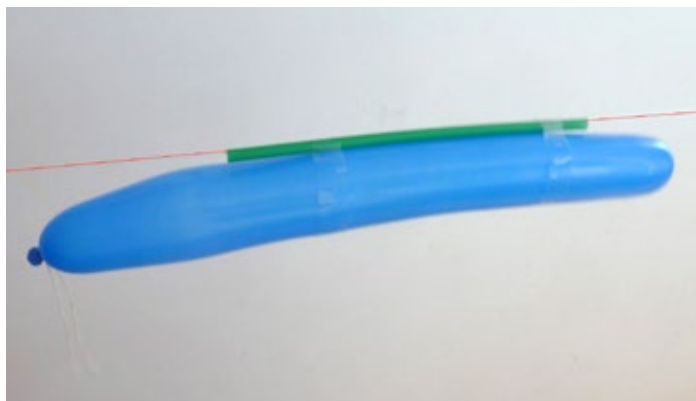
YOU WILL NEED

A selection of balloons, balloon pump (optional), drinking straw (non-bendy type), sticky tape, wool or string, tape measure or metre stick (optional), mass balance (optional), a cooperative group!

BASIC INSTRUCTIONS

Feel free to experiment!

1. Inflate the balloon - close it with a temporary tie, or hold it tightly closed until “launch”.
2. Thread the wool or string through the straw to make the “track”.
3. Tape the straw to side of the balloon as shown.
4. Stretch the string out so it is taut.
5. Move the balloon along to one end of the track, then release the temporary tie.
6. Measure the distance travelled, or the time taken to travel 1m.
7. It may take several attempts to perfect a good rocket.



INVESTIGATE

- Which shape of balloon works best? (we used modelling balloons here, and we think they are a little bit too thin)?
- Is the length of the straw important?
- Will the slope of the track affect the distance travelled?
- Challenge your friends - whose team can design the best rocket?

WHAT IS HAPPENING?

This is an example of air pressure causing a force that can make something move forward.

EXPLORE MORE...

<http://www.sciencebob.com/experiments/balloonrocket.php>