

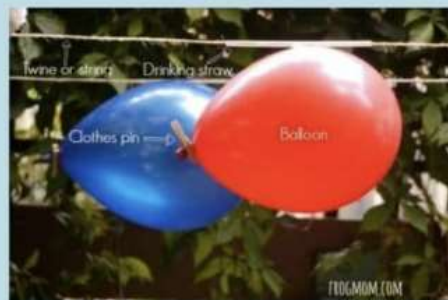
Can you try this experiment using different strings? (wool, garden wire, garden string, normal string)

Which string allows the balloon rocket to go furthest? Why do you think this is?

Balloon Rockets

You will need:

- Balloon (round ones work but the longer ones are best)
- String
- Straw
- Tape
- Clothes peg



1. Tie one end of a piece of string to a chair, door handle etc. or have someone hold the end.
2. Put the other end of the string through a straw and pull the string tight.
3. Inflate the balloon, twist the end and secure it with a clothes peg.
4. Use tape to attach the balloon under the straw.
5. Release the peg to launch your rocket!

THE SCIENCE

The rocket moves by something called thrust. As the air rushes out of the balloon, it creates a forward motion called thrust. Thrust is a pushing force created by energy. This thrust comes from the energy of the balloon forcing the air out. Different sizes and shapes of balloon will create more or less thrust. In a real rocket, thrust is created by the force of burning rocket fuel as it blasts from the rocket's engine – as the engines blast down, the rocket goes up.

Mark on the string with pen where your balloon ends and try to beat it.

Why not set up two and have a race?

@MrsBpriSTEM