

# The Balloon Rocket Experiment

Any experiment with “rocket” in the title has got to be a winner! This one is particularly fun and as it’s a balloon rocket it can be done inside, that means you can have fun experimenting whatever the weather!

## What do I need:

- Ball of string
- Scissors
- Straw
- Balloon (long, thin ones work best but any will do)
- Sellotape



## How do I do it?

**STEP 1** - First of all blow the balloon up. Unless you’re much better coordinated than me (definitely possible!) you’ll want to twist the end round and stick it down (as shown) to make connecting your rocket up nice and easy!



**STEP 2** - The next step is to stick a straw across the top of your balloon and thread your string through there.

**STEP 3** - Now you want to build your flight path. Tie your string across the room (maybe about 5 meters in length) and make sure the string is nice and tight!



**STEP 4** - It’s time to launch! Untie the end of your rocket balloon and release it, let your rocket fly!

## What’s going on?

Your balloon rocket flying across the room is a great way to learn about forces. You’ve probably heard “every action has an equal and opposite reaction” and this is a great example of that. As you release the balloon the air shoots out to the left and this will push the balloon to the right, with an equal and opposite force. As our balloon is nice and light it should go pretty far and the string just means that we can map out our flight path!



## More Fun Please - Experiment like a real scientist!

- How can you make the balloon go as far as possible?
- What happens if you make the balloon heavier (by adding some Blue-Tac for example)?
- Which type of balloon makes your rocket fly furthest?

