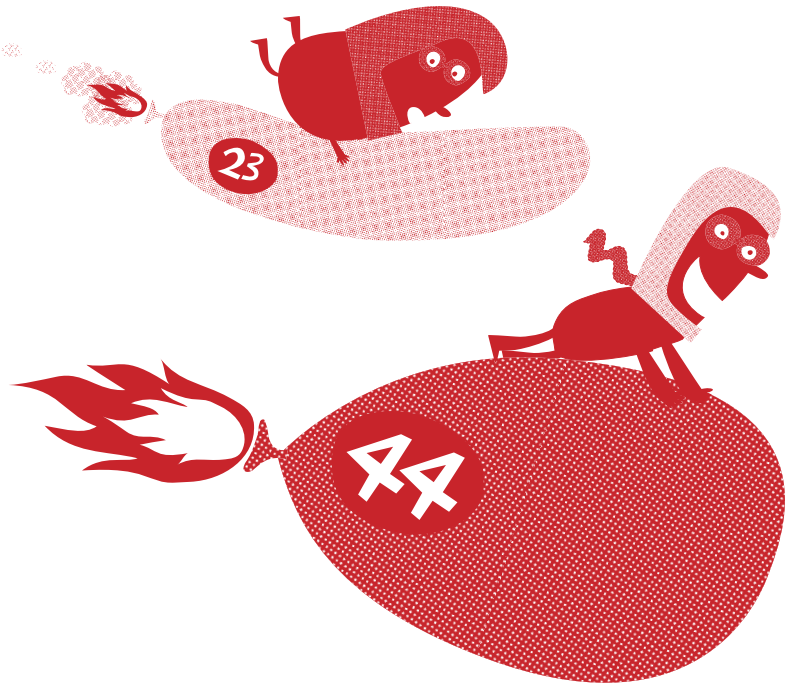


Rocket balloon race

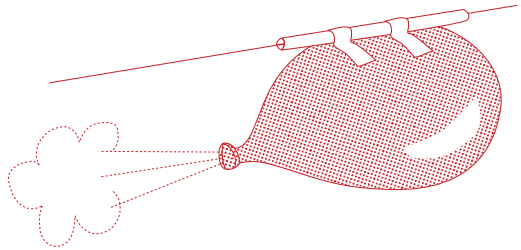
Concept—Anything that moves uses energy/fuel

Curriculum Link:
Science Curriculum—Energy and Forces strand

Experiment

You will need:

- 2 long pieces of string (e.g. length of classroom)
- 2 straight drinking straws
- Sticky tape
- 2 ordinary round balloons



1. Hold either end of the string and stretch it tight across the room.
2. Blow the balloons up but do not tie them off.
3. Tape the balloons underneath the straws.
4. Thread the string through the straws: have each balloon starting from the same end with the nozzles pointing the same way.
6. Count down and let the balloon go.

You could have a balloon race by dividing the class into teams and setting up a couple of strings. Count down, release the balloons and see which team's balloon wins the race. The air rushing out of the nozzle in one direction pushes the balloon in the opposite direction. The release of air is the fuel of the rocket.

Try half-filling one balloon and filling the other and see what happens. You only get out the energy you put in. A space rocket is pushed upwards when hot gases, released from the burning fuel, are pushed out the bottom.

Note: See 'How to Make a Balloon Buggy' in the 'things to make' section of the web site.