

You need

rocket template

film canister with a cap that fits tightly inside the rim (not outside)

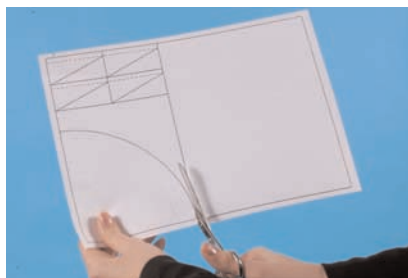
sticky tape

scissors

water

Alka-Seltzer tablets – these contain aspirin; do not allow students to eat them.

Bubble-powered rocket



1 Cut along the solid lines on the template and fold along the dotted line to give a rectangle, a segment of a circle which will be the nose-cone and four fins.



2 Place the rectangle of paper as shown and stick firmly to the canister. The lid should be at the open end of the tube and the paper must not cover the lid. Roll the paper tightly to make the rocket body and stick down.



3 Roll the quarter circle paper into a cone shape and tape to the top of the rocket. Tape the fins to the rocket body.



To launch

- Make sure everyone stands well away from the launch area, at least 3 metres.
- Remove the canister lid and fill the canister one-third full of water. Add half an Alka-Seltzer tablet, close the lid quickly and place the rocket on a launch pad (tray or shallow plastic box) .
- Stand well back and count down to lift-off.

Hints

- Alka-seltzer left out of their packets for some time do not work as well.
- For cold water allow a countdown of approx 20 seconds; on warm days or using warm water fewer than 10 seconds. Make sure the person launching the rockets moves out of the way quickly and wears eye-protection. The rockets can launch with considerable force.
- Do not go back to the rocket if it does not lift-off immediately - be patient and don't go near until you are sure it is inactive.