To launch our Term 4, Science unit “Our Place in Space” we are challenging you to follow the design brief and construct a rocket that will be tested in the first week of term 4. You may make modification to your rocket and individualise it as much as you like but need to use the template supplied in order for it to be compatible with the launcher. You need to bring your completed rocket and a clean and empty 2L soft drink bottle to school on the first day of term 4. Please make sure your

Description
The rocket with a triangular cross section is made from three rocket-shaped strips of cardboard or paper and launched with the Pop! Rocket Launcher.

Materials
Cardboard template (provided)
Film canister (provided)
Glue stick
Sticky tape
Scissors
Coin
Empty 2L bottle - each student will be required to bring a bottle to school.

Basic design and construction
Pop! Rockets are made by cutting out three rocket-shaped pieces of paper and joining them together. The basic pattern is a long rectangle with a triangle on one end. When the three rocket sides are taped together, the triangles are bent inward and taped to form a three-sided pyramid that serves as the rocket’s nose cone. At the opposite end are geometric shapes such as triangles or parallelograms that extend from the sides of the rectangles to form the fins. The fins are glued or taped together face-to-face to make them stiff.
The three rectangles, when taped side-to-side, form a triangular prism shape that slides over the launch tube of the Pop! Rocket Launcher.

Tape a weight (coin) to the inside of one of the three nose cone triangles before taping the nose cone together. The coin adds additional mass to the nose and increases its flight stability.

For the rocket to be compatible with the rocket launcher place the film canister at the base of the rocket. Remove the lid and make sure the open end of the canister is at the bottom of the rocket so it can slip over the top of the rocket launcher.

Modifications
• Before taping, you can draw pictures of yourself, friends or family peering out from “port holes” near the nose cone end of the rocket.
• The rockets can be decorated along their entire length.
• Fins can be modified to improve flight and additions may be made to the rockets to make them more aerodynamic or able to cover greater distances.
• Whilst a template has been provided you may wish to use materials other than cardboard or paper to construct your rocket however it must comply with the template.
BASIC DESIGN PATTERN

Modifications may be made

Ideas for Different Fin Shapes

Thank you

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