

# QAST Weekly Challenge

## Balloon Car

Introduction: Many children like to play with toy cars, especially those that move on their own.

Your challenge: create a small toy car that will move under its own power. The driving force must come from air expelled from a balloon. Try to make the car so that it will travel along way and move quickly.

Resources: For this task you may use

A balloon

A paper cup or small plastic drink bottle

Two plastic drinking straws or wooden skewers

Four cotton reels (or drink lids with holes in them)

Four small rubber bands

Scissors

A pencil

Process:

- Using scissors, carefully cut the cup or bottle in half lengthways, to create the car body.
- Using a sharp pencil, poke two sets of holes through the length of the cup. One set near the top of the cup, and one set near the bottom. Poke another hole through the bottom of the cup.
- Insert a straw or skewer through each set of holes. Then, slide the cotton reels or lid wheels on to each end of the straws.
- Wrap a rubber band around the end of each straw; these will keep the wheels from sliding off.
- Push the neck of the balloon through the hole in the bottom of the cup. The balloon should be lying inside the cup. Make sure the hole is big enough to let the air out.
- Blow up the balloon, place on a hard surface and release.
- Measure how far the car goes.
- Time how long the car takes to travel two metres.

