

BALLOON POWERED CAR

Lab Tech Notes

Overview

Subject: Science and Technology

Grade: Years 7 – 9

Topics: Interaction between materials and energy and understanding resistance and propulsion.

Materials

Item/s per student	Where to buy?
Materials listed are only a minimum for each car, students should be provided with some extra incase of mistakes.	
1x Milk carton	Supermarkets, recycle from cafes
2x Drinking straws	Supermarkets
2x Bamboo skewers	Supermarkets
4x Light toy truck wheels or plastic screw tops from milk bottles	Online, craft stores
2x Balloons	Supermarket, party store
1x A4 Poster paper	Officeworks
Various weights	Bunnings

Tools

Item/s	Where to Buy?
Ruler or measuring tape	Officeworks
Scissors	Officeworks
Craft knife or blade	Officeworks
Hot glue gun	Officeworks, Bunnings, Craft store
Extra hot glue gun glue	Officeworks, Bunnings, Craft store
Stop watch	Rebel Sports
Safety glasses	Officeworks

Risk management

The main hazards are the hot glue gun and craft knife. The hot glue gun does get very hot at the tip of the gun and can cause minor burns. These need to be monitored and students must be warned of safety instructions prior.

While cutting the skewers with either scissors or a scalpel, sections can fly off unexpectedly. Students should wear safety glasses/goggles so as to protect themselves from anything getting in their eyes.

Difficulties

Having little gap between the wheels and straw is important. A large gap will make the wheel's wobble, causing the car to veer left or right and overall reducing the distance travelled. With no gap the straw will impede the wheels turning.

Having a bit of resistance has been found to stop the car from travelling fast but allows it to travel further, however getting the hole for the balloon to be a good size can be difficult.

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