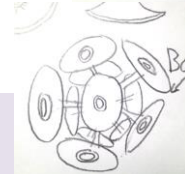
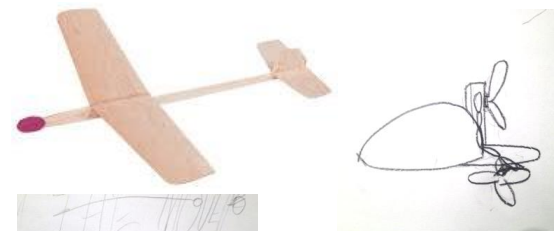
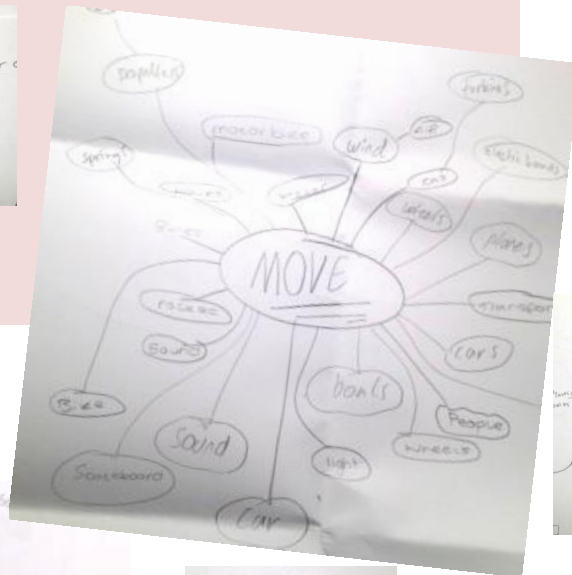
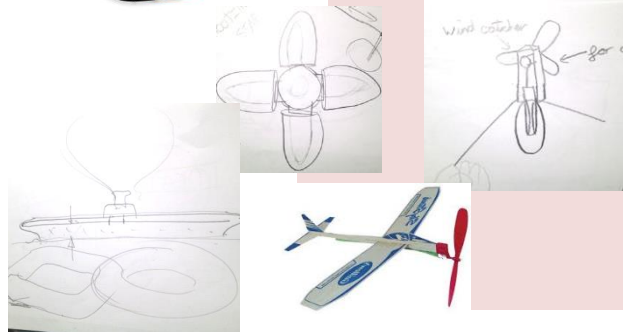


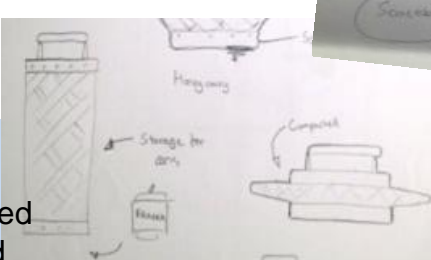
# Research and Initial Ideas

'MOVE' - We explored lots of ideas to fit the 'MOVE' theme, and lots to do with simple vehicles and craft, made from junk or re-cycled materials and all self assembly



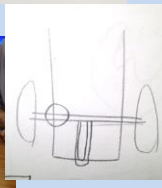
**Target Market** – we liked the idea of a moving toy for kids – one you have to make yourself maybe – but how to suit it to the DM Shop?  
*Hmmm!*

**Off the shelf materials** – interesting because there is no tooling cost and they are available *Just In Time*

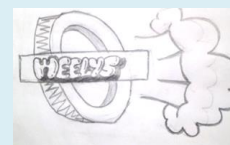


**Reusing cardboard** – we looked at how we could use re-cycled paper products and old CDs

**Prototypes** – We started to sketch our ideas and build prototypes to see if we could get our ideas to work



**Logo and name**  
Because TFL are in the business of **MOVE-ing** people we thought this could be a good sponsor link



Idea for air propulsion using a balloon and low friction wheels



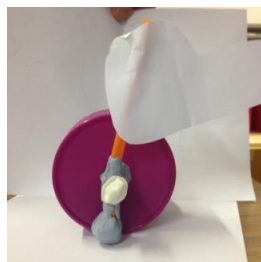
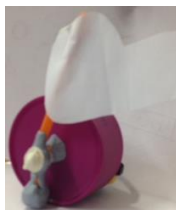


# Idea development

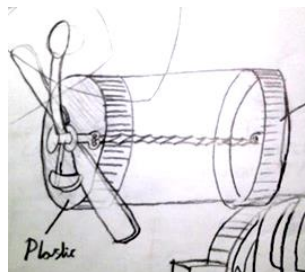
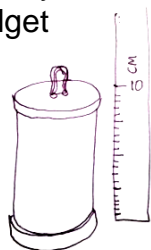
'MOVE' – Our best idea to fit the brief was a toy vehicle for kids, simply made, simply packaged, self assembled and made from totally recycled or recycle-able materials, on a pocket-money budget

## WHEELYS

**Prototypes** using rubber band motor and mechanism



Compact Size



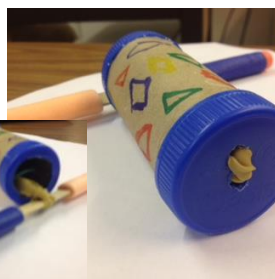
It works!! Kind of?

## Self-assembly

Self-assembly reduces production cost while adding interest and challenge but still suitable for ages 6-12



Toilet roll Or tube



This one Works better



Using 100% Recycled or Re-purposed materials



**Marketing**  
TFL sponsorship



Stickers for racing



DESIGN MUSEUM



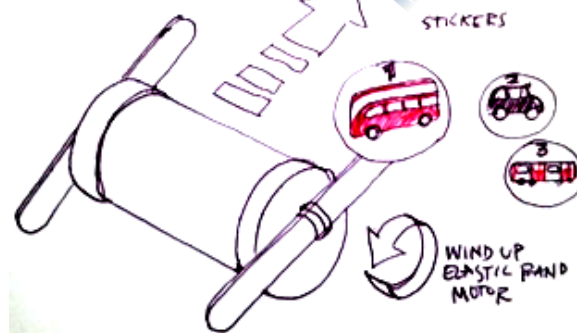
**Merchandising**  
Hanging or on-shelf



**Prototype**  
YAY! It works!!

Simple operation  
wind up and race

Stickers for racing







# WHEELYS

## Final design –

A rubber-band-powered, toy racer, for kids aged 6-12. Apart from printing the stickers, all the components are sourced off the shelf or made from recycled materials



Instructions and information



Branding and USPs

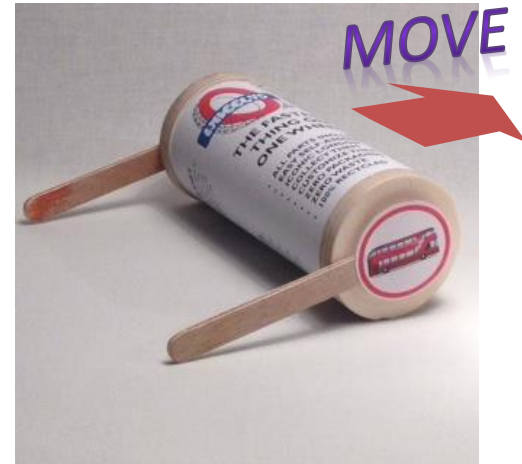


Stickers for racing

### Components



### Ready to race



**SAVING YOUR PLANET**  
First lift the lid and remove the contents of the tube. First lift the lid and remove the contents of the tube. First lift the lid and remove the contents of the tube. First lift the lid and remove the contents of the tube.

**INSTRUCTIONS**

1. First lift the lid and remove the contents of the tube
2. The contents of the tube
3. First lift the lid and remove the contents of the tube
4. The contents of the tube
5. First lift the lid and remove the contents of the tube

**WHEELYS**

**RUBBER BAND POWERED TOY VEHICLE**

**THE FASTEST THING ON ONE WHEEL**

- ALL PARTS = INCLUDED
- EASY = SELF ASSEMBLY
- ICONIC = LONDON
- COLLECT = RACE THEM
- CUSTOMIZE = STYLE THEM
- ZERO PACK = SAVE ENERGY
- ZERO WASTE = SAVE PLANET
- 100% RECYCLED = YOU CARE

SPONSORED BY TRANSPORT FOR LONDON

### USPs



### Costing

- Batch production quantity – 1000
- Cost price per product - £1.40
- Retail price per product - £4.99
- Total income per 1000 - £4990.00
- Total cost per 1000 - £1400.00
- Total profit per 1000 - £3590



School name: Finchley Catholic High School

Product name: Wheelys

Year group: Y9 & Y10

### **Team members**

Christopher ██████████ - Designer/Communications

Paulo ██████████ - Designer/ Team leader

Callum ██████████ - Designer/Finance

Jake ██████████ - Designer

Oliver ██████████ - Designer

### **Your idea**

To answer the brief theme of 'MOVE' we designed and prototyped a rubber band-powered vehicle, made from 100% recycled and mainly off-the-shelf components. Once assembled, the rubber band is wound and the vehicle is set OFF! Stickers can be attached to the vehicle and several of them can be raced against each other. It would be purchased as a novelty souvenir or construction toy as the packaging carries TFL branding to promote the Capital's iconic forms of transport, ie red bus, black cab and silver tube train. In the Design Museum shop it would be located in the Gadgets and Games section, adding to the existing range of board games, construction games, creative design kits and models.

### **Target audience**

Suitable for children ages 6-12 as well as adults. (a) Purchaser – Tourists looking to purchase an inexpensive 'London' souvenir (b) User – children aged 6-12 The product would be suitable for sponsorship by TFL, with the associated logo and branding, and advertised on poster panels on buses, tube trains and taxis. Additionally, TFL may produce larger tube station posters promoting Design Museum exhibitions with reference to the toy as a promotional offer. The product may also be promoted and sold in the London Transport Museum.

### **Manufacturing**

The product is comprised: 1 cardboard tube (toilet roll, sourced as off the shelf item), 2 lolly sticks (sourced as off the shelf items), 1 rubber band (sourced as off the shelf item), 2 plastic end caps (recycled or sourced as off the shelf items), 1 instruction leaflet with 3 stickers, also incorporating the product name and branding. The sticker is wrapped around the product and doubles as the packaging graphics. (printed 3 colour self-adhesive panel) The components will be sourced and packed by hand: the cardboard tube is wrapped with the sticker. The 2 lolly sticks are placed inside the tube. The rubber band is attached to an end cap, passed through the tube and attached to the other end cap, holding both caps in place. A loop of elastic band protrudes from the top end allowing the product to be merchandised as a hanging product.

### **Sustainable design**

The product is made from 100% recycled and mainly off-the-shelf components. All the packaging is used in its construction so nothing is thrown away. The product promotes an awareness of recycling. It raises awareness of London's credentials as a 'Green Capital' and TFL's credentials as a champion of sustainable development.

### **Costing and budget**

The cost price of ONE of your products: £1.4

The retail price of one product: £4.99

Number of products you plan to make and sell: 1000

The total amount that you will make from sales: £3590

The charity you will donate the proceeds to, and why:

SEED - Sustainability and Environmental Education. Sustainability and Environmental Education (SEEd) is a registered charity that identifies, promotes, enables and supports environmental education and education for sustainable development in the UK