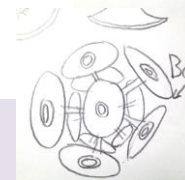
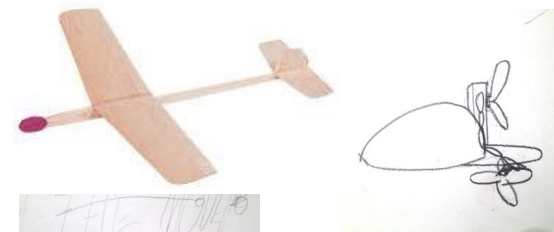
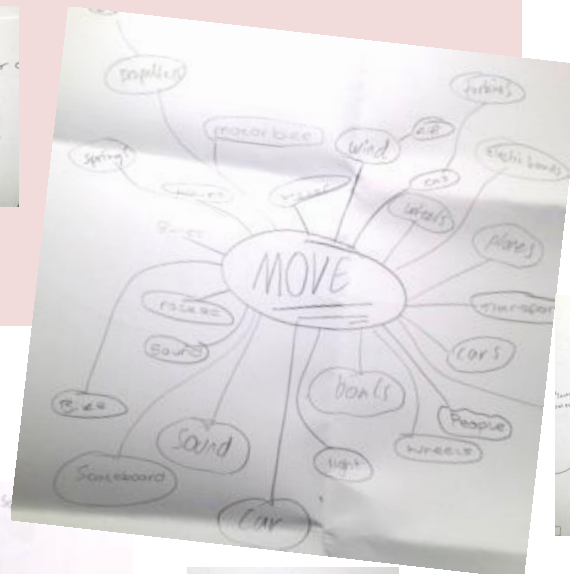




Research and Initial Ideas

WHEELYS

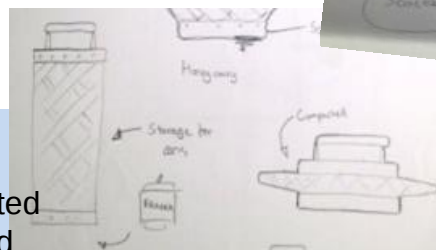
'MOVE' - We explored lots of ideas to fit the 'MOVE' theme, and lots to do with simple vehicles and craft, made from junk or re-cycled materials and all self assembly



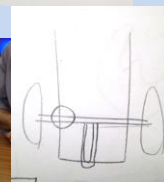
DESIGN
MUSEUM
SHOP

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!

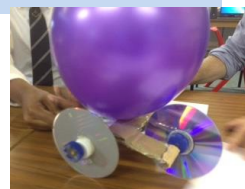
Off the shelf materials – interesting because there is no tooling cost and they are available **Just In Time**



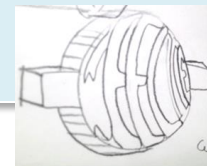
Prototypes – We started to sketch our ideas and build prototypes to see if we could get our ideas to work



Idea for air propulsion using a balloon and low friction wheels



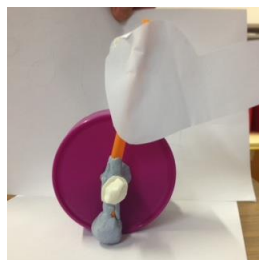
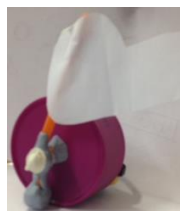
Logo and name
Because TFL are in the business of **MOVE-ing** people we thought this could be a good sponsor link



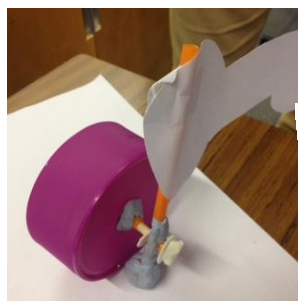
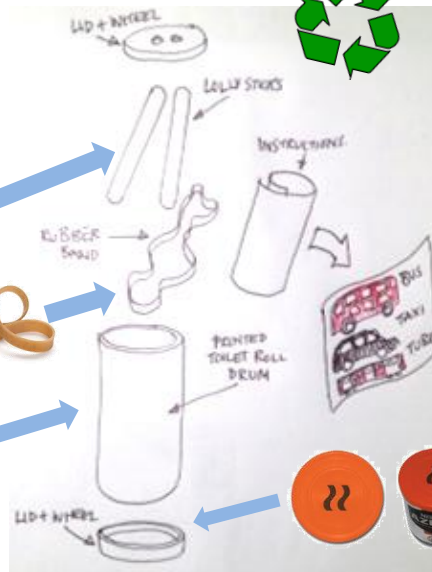
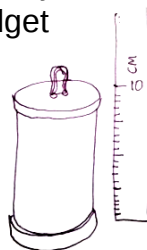
Idea development

‘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

Prototypes using rubber band motor and mechanism



Compact
Size



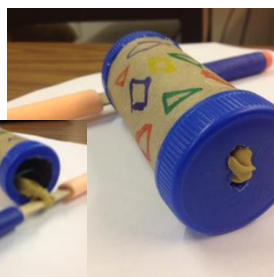
It works!! Kind of?

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

Stickers
for racing



Marketing
TFL sponsorship



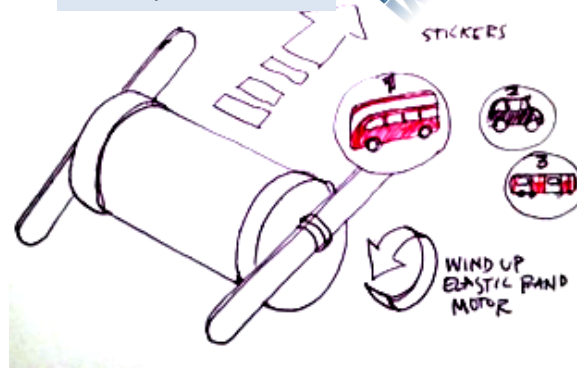
Merchandising



Prototype

YAY! It works!!

Stickers
for racing



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

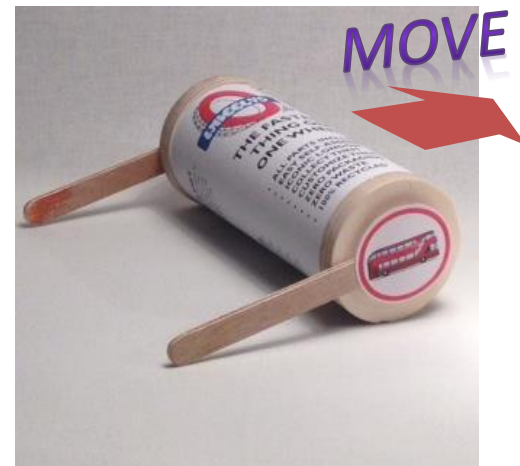


Stickers for racing

Components



Ready to race



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 Ogunnowo - Designer/Communications

Paulo Petrone - Designer/ Team leader

Callum McKnight-Posner - Designer/Finance

Jake Gianniti - Designer

Oliver Sawicki - 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