## "Robot Sprint Project"



#### Headstart 2003

## Challenge

- Design
- Build
- Test

- Practical
- Teams
- FUN!

## **Design/Build Process**

- What needs to be designed
- Ideas/Concepts
- Assessment
- Detailed Design
- Manufacture
- Trials

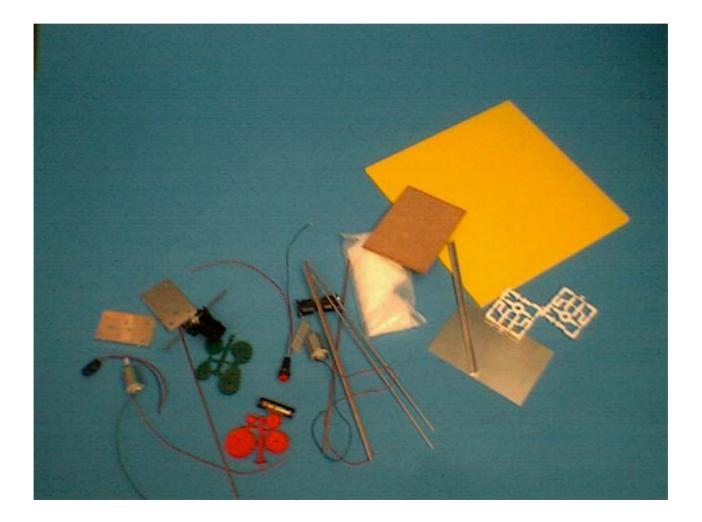
## **Design/Build Process**

- What needs to be designed
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## What Is Required?

- "Walking Robot"
- Move 2.4m (Track 0.4m Wide)
- As Fast As Possible

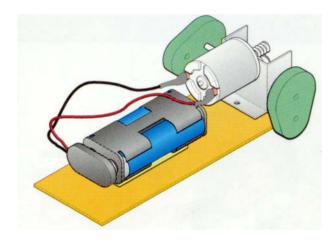
### **Construction Kit**



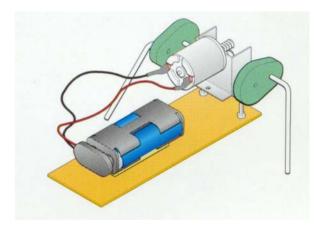
# Kit Components

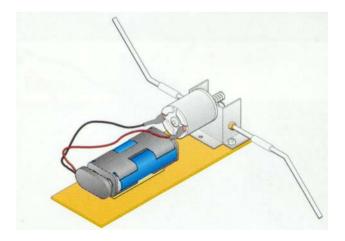
- Two Motors, Batteries, Switch etc
- Various Cams, Gears
- Construction materials Corriflute, Wood, AI
- Fixings, Glue, Screws, Nuts etc
- Hand Tools
- Workshop tools
- Extra Items!!!

## **Possible Drive Systems**

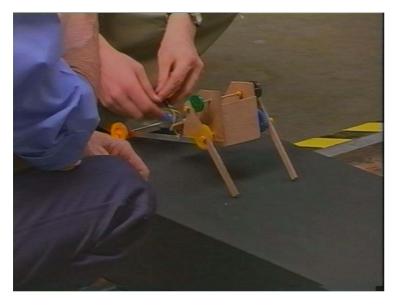


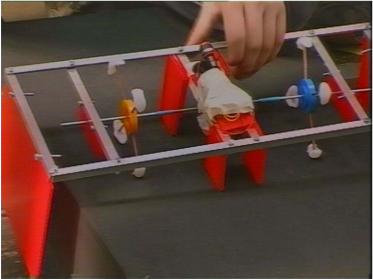


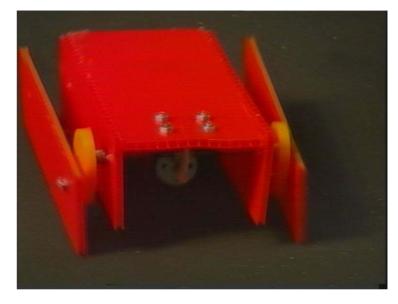


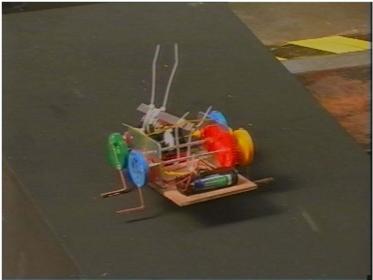


#### Embodiments









## Timetable

#### Tuesday 24th June

- Lecture
- Workshop Orientation
- Conceptual Design
  - 3.30 grps 1-6 to Jesus
  - 4.30 grps 7-12 to Jesus

#### Wednesday 25th June

- 9.00 Start construction
- 1.00 Lunch Peterhouse
- 2.00 Competition
- 3.15 Tidy Up
- 3.30 Finish

# Safety

- Only Use Workshop Equipment under supervision
- Care with HOT Glue guns
- Wear Safety Specs at all times
- Sharp Knifes

• Beware of other users





## IDC 2001 – Osaka, Japan



## The Work







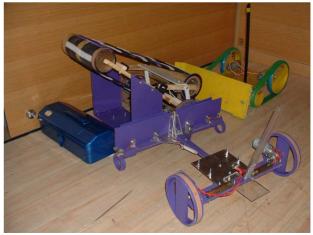


## The Designs





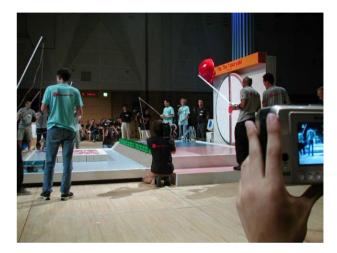




### The Event – Osaka 2001









### The Winners



## The Fun







