

# Development

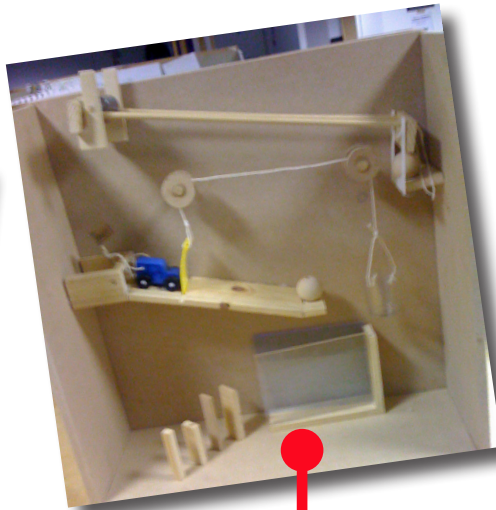
## Concept Proposal

We found a need for a more hands-on approach to teaching science, to allow teenagers to learn through doing



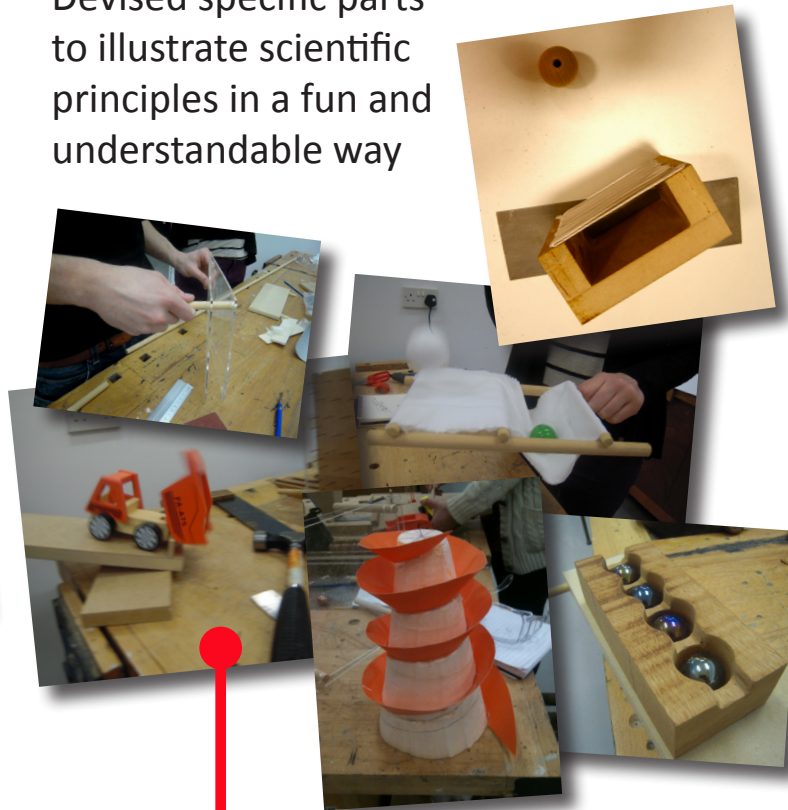
## Initial Prototype

Learnt that it was too small, too fast and needed more flexibility



## Components

Devised specific parts to illustrate scientific principles in a fun and understandable way



## Board

Optimum size for group work and visibility, with logical coordinate system



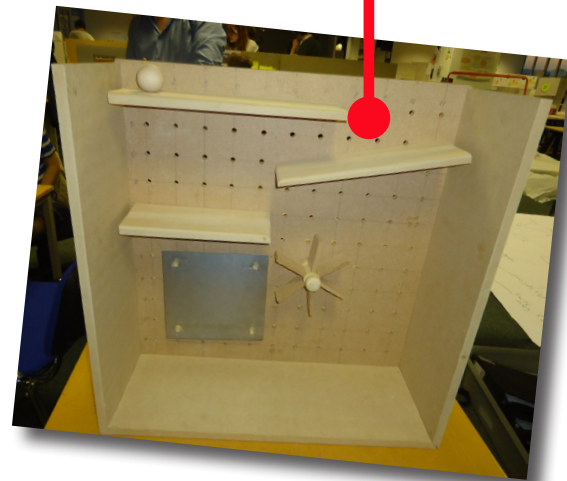
## Final Prototype

The models were set up in possible runs and put on display while we observed peers interacting with them



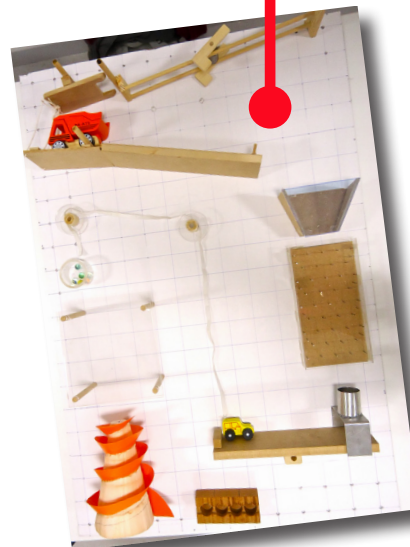
## Themes

After considering themes, we focussed on basic principles of physics, materials and common mechanisms



## Pegboard

The development of an intuitive pegboard system with metallic plates improved versatility and allowed multiple combinations



## Practice Runs

Alternating layouts enabled us to determine how to connect components



## Finalising

Components were painted, and we created fact signs and straightforward instructions



## User Testing

The models were trialled in a school environment with first year pupils, who enjoyed the novel way of learning