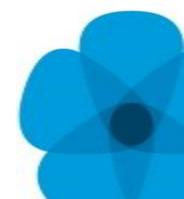


KS2 (Late) Motorised frameworks

Sarah Pook and Bernard Cooper 20 April 2018 Draft

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Overview

In this document

Teaching and Learning support for Motorised Machines

Suggested designing and making sequence for core mechanism





Design and Technology Computer Control

- Computer control of motors and mechanisms can only be successfully achieved when the mechanism operates reliably.
- Children can achieve successful computer control by designing and making the motorised unit which lies at the core of any mechanism as a 'focussed practical task'.



Design and technology Computer Control



- Once children have been successfully led through the design and manufacture of the 'motorised unit', they are then well placed to incorporate their 'unit' into any moving machine.
- Successful electrical and computer control activities can be combined with the creative adaptation of the basic 'unit'



Design and Technology Computer Control



- The following sequence shows how the basic motorised unit can be successfully designed and made.
- A 'stage by stage' approach is used to enable children to discuss and reflect on technical issues and to help gain understanding and confidence.



Fairground Ride Possible Sequence

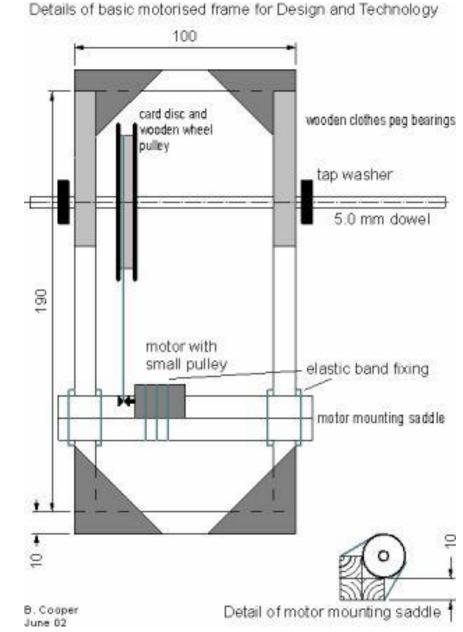


- Introduction, exploration of types of ride, principle features inc use of electric motor etc.
- Exploration, development and manufacture of motorised unit ('Focussed Practical Task').
- Development into individualised fairground ride.
- Exploration of electrical control of motor.
- Exploration of computer control of motor (FPT).
- Test, review, exhibit, evaluate.



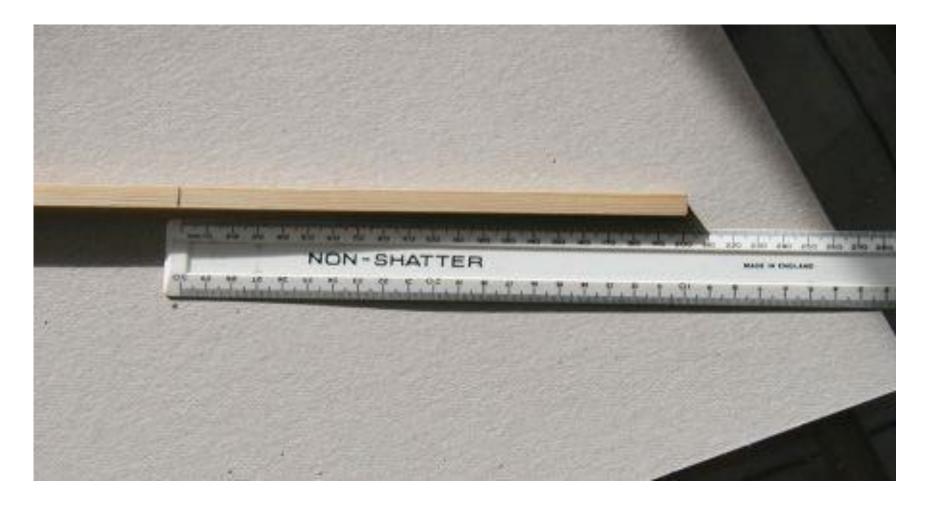
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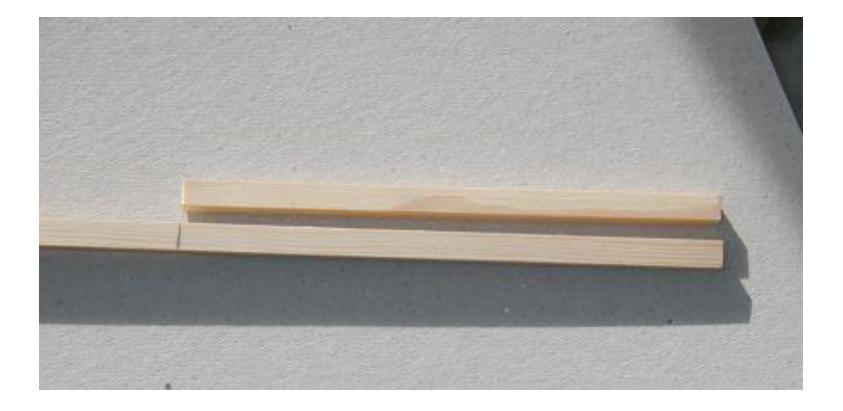






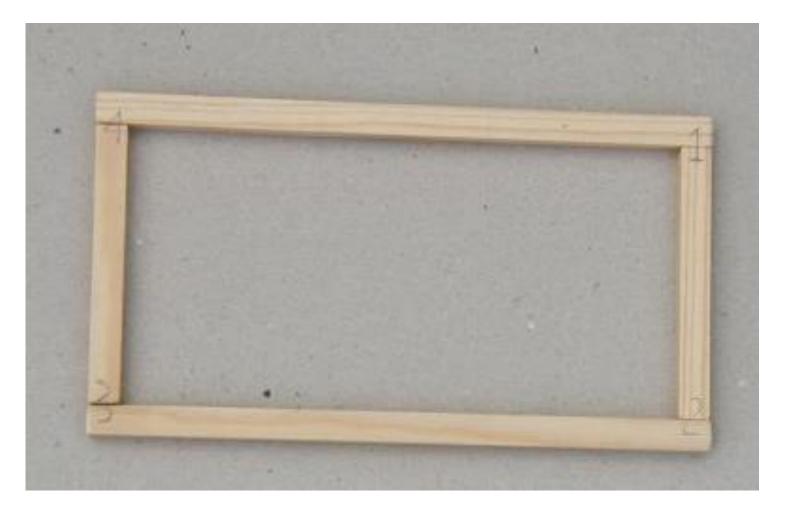






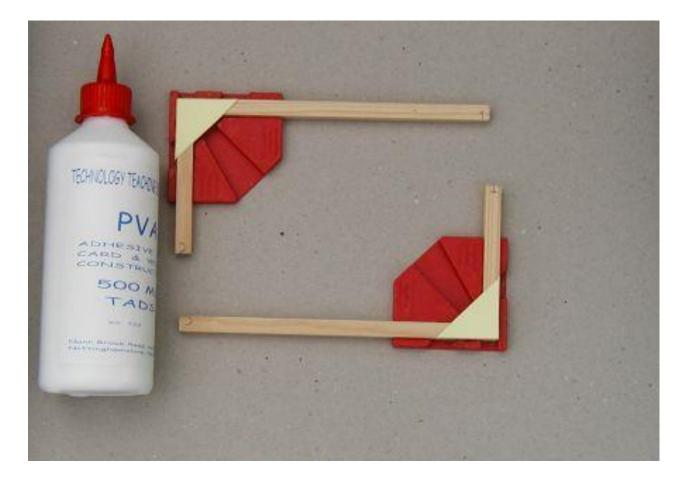






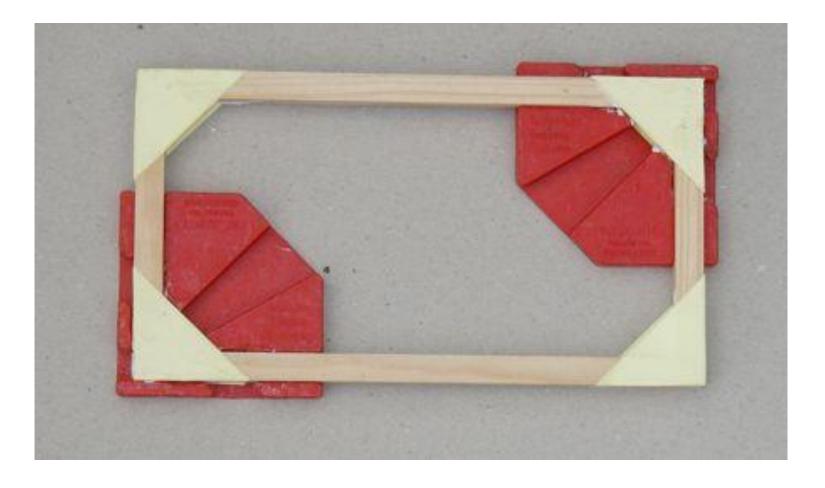






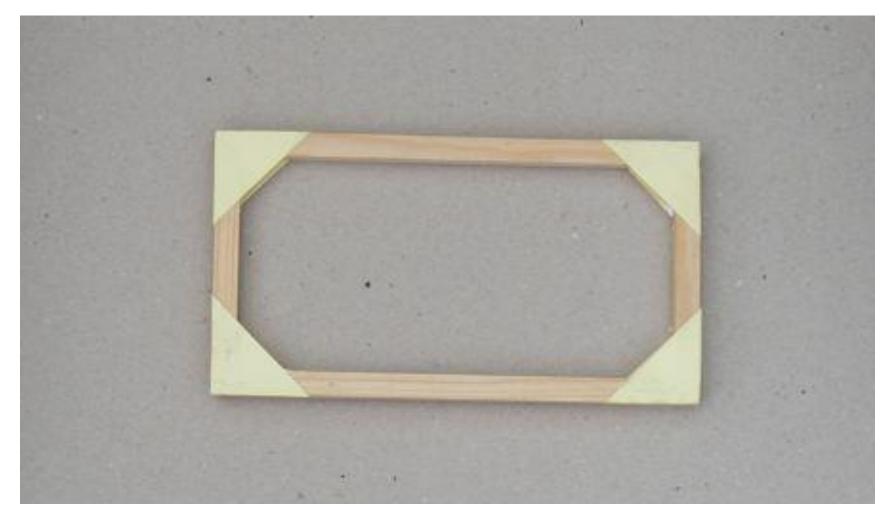






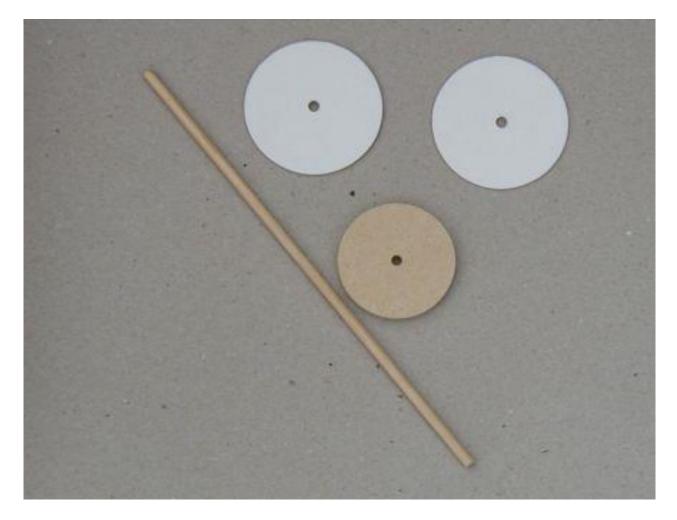












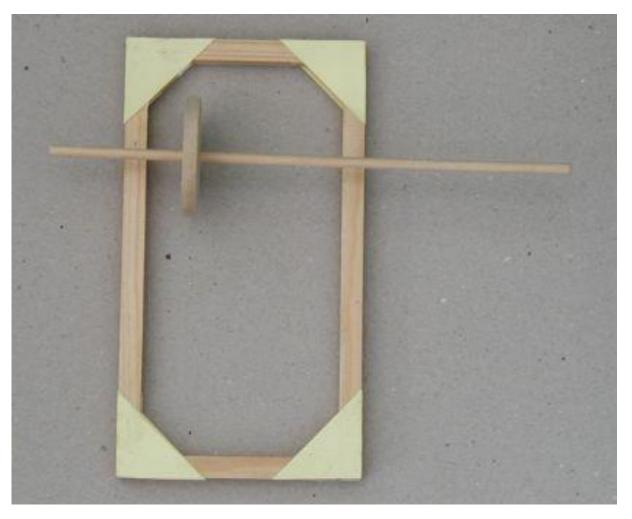












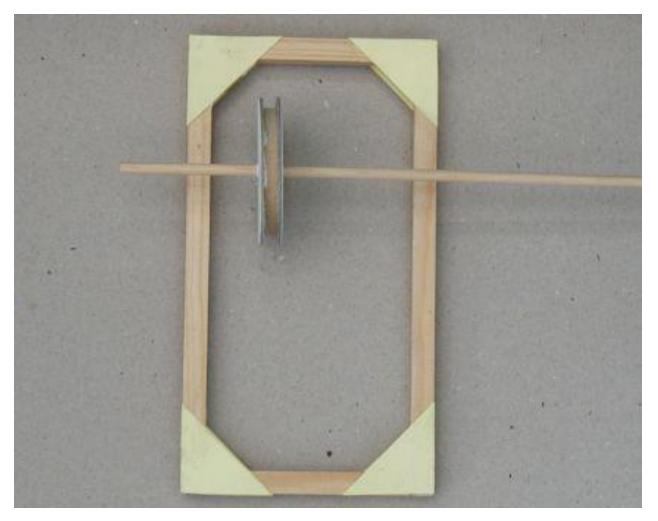






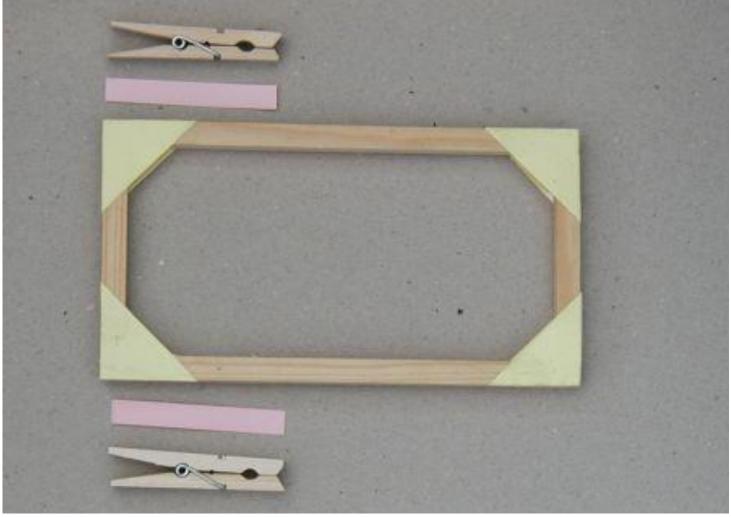






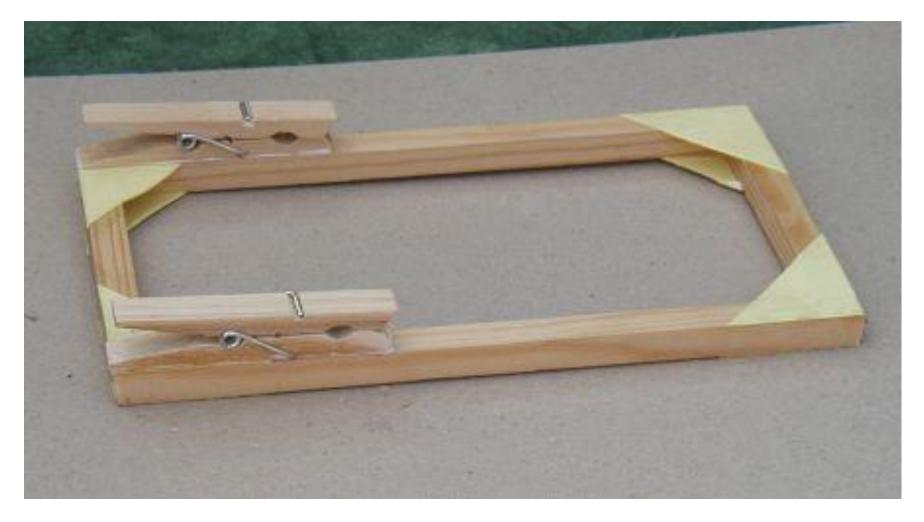






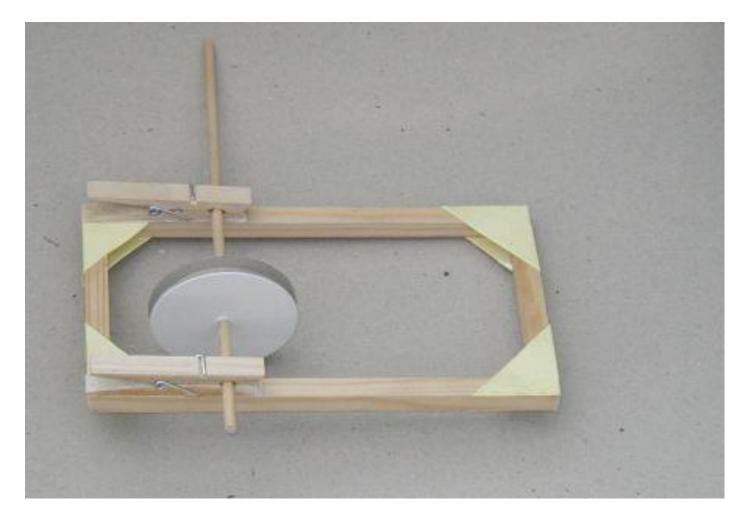






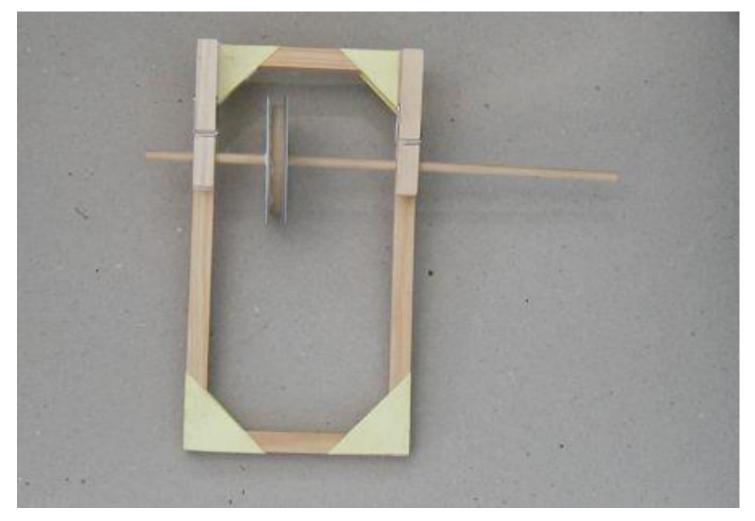






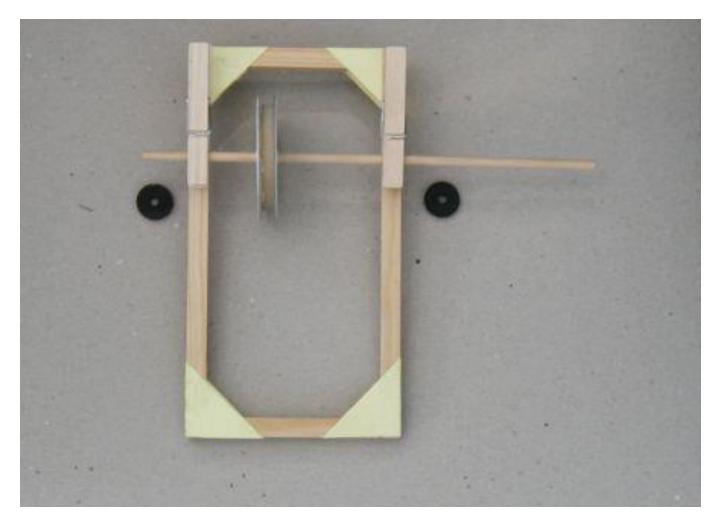






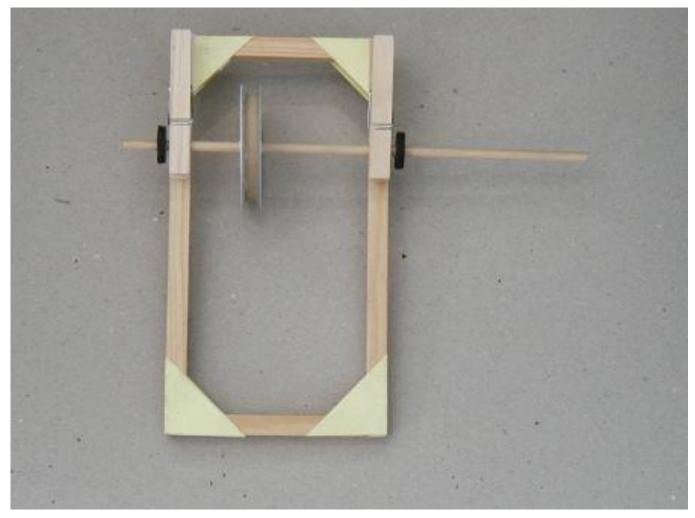






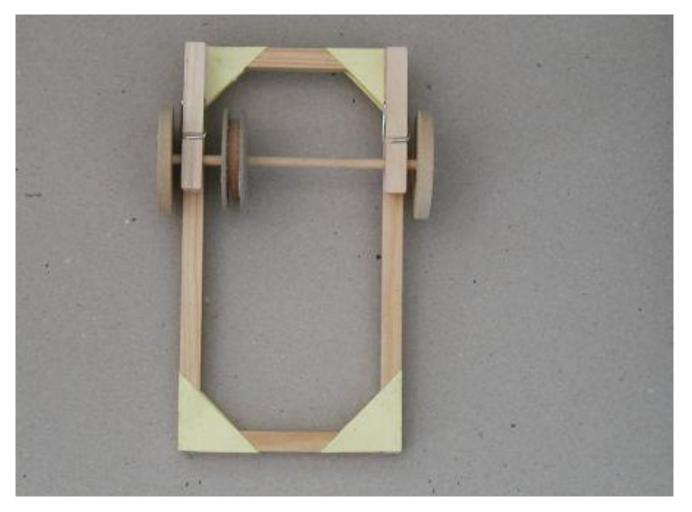






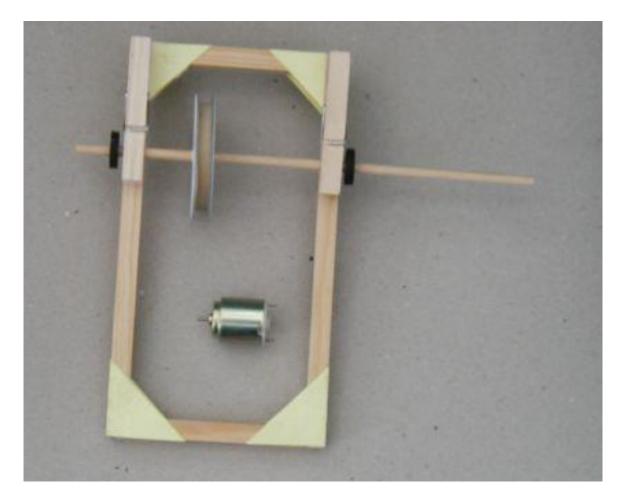






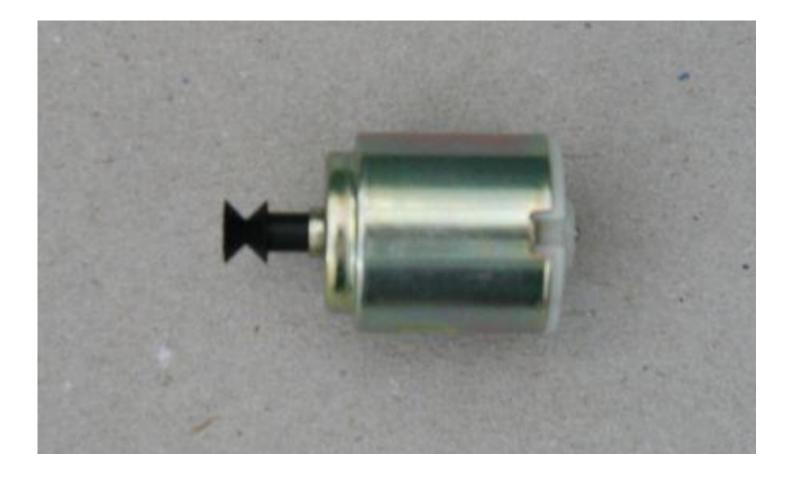






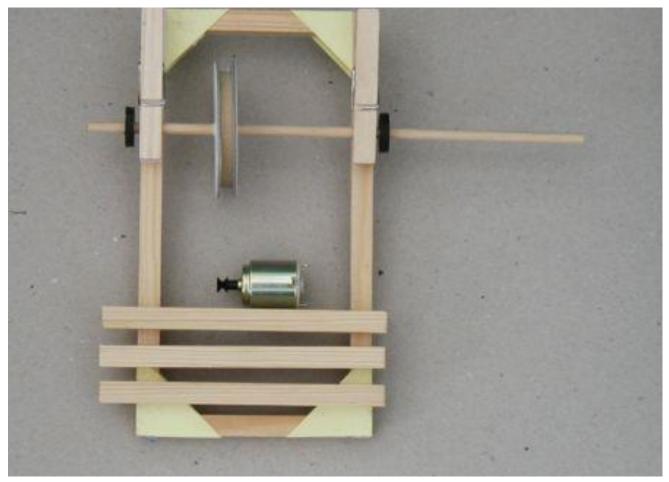






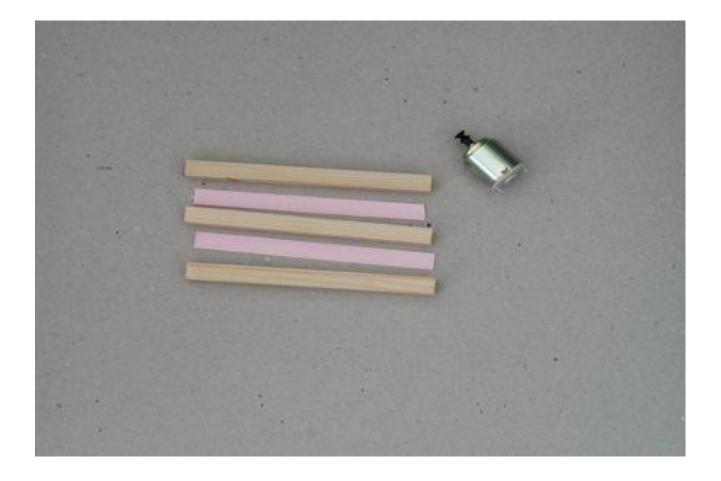






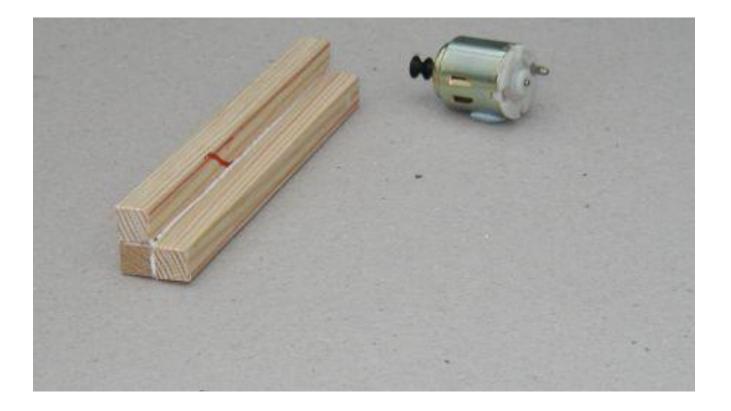








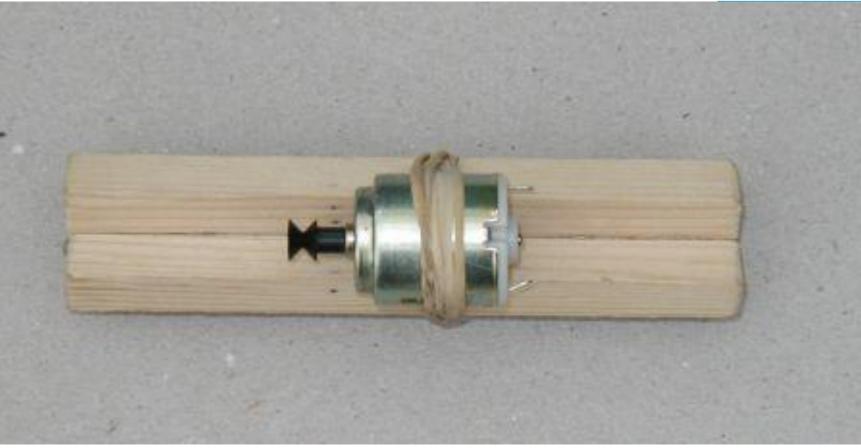






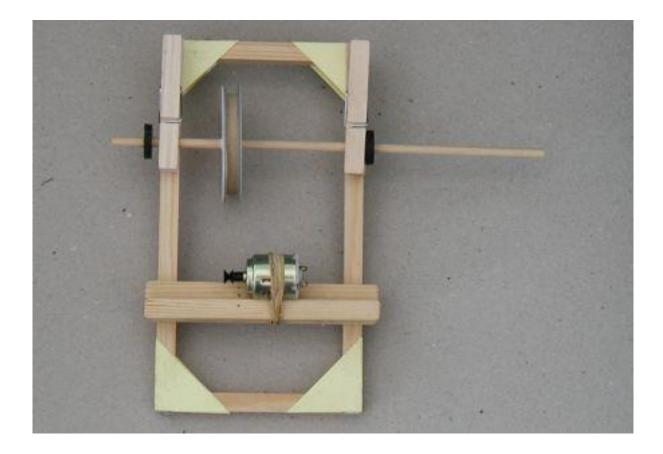
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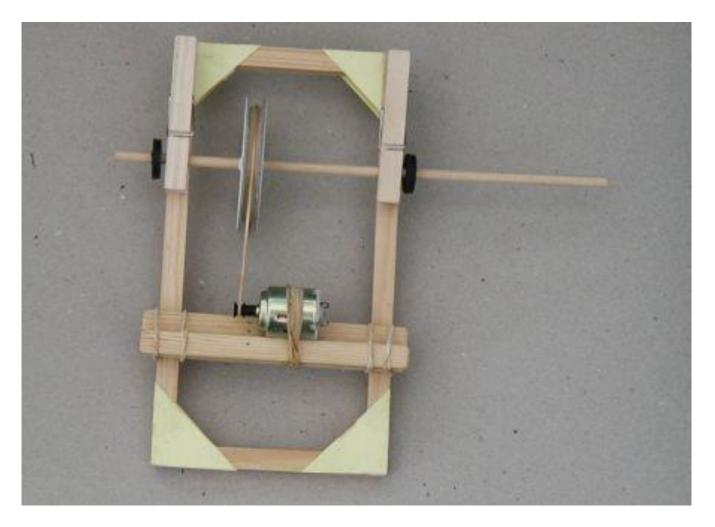






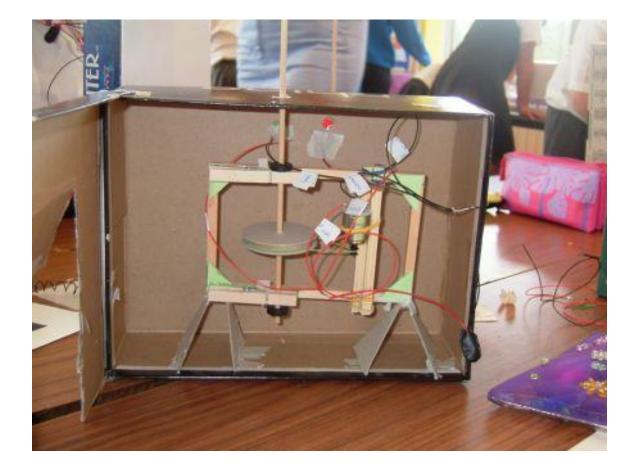






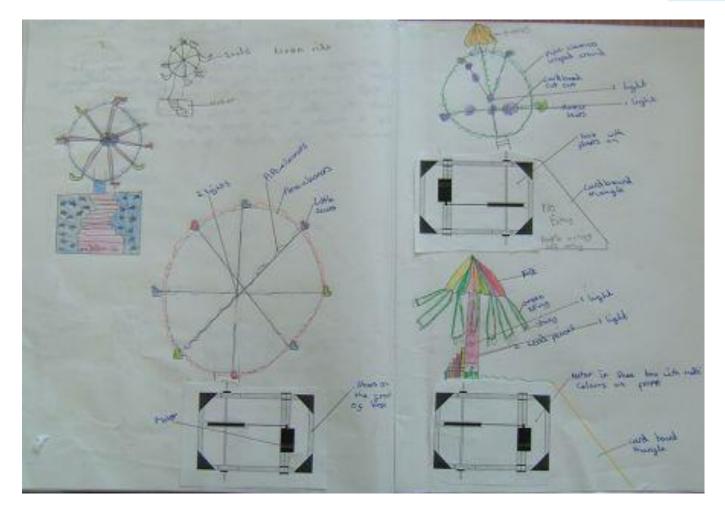










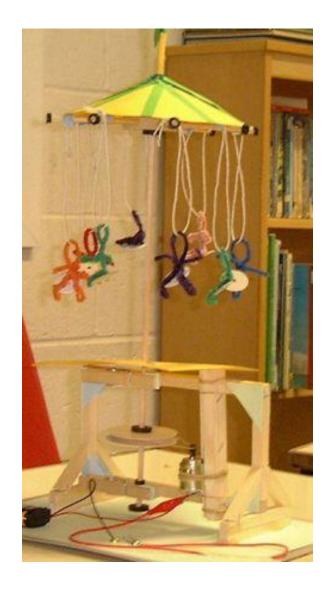








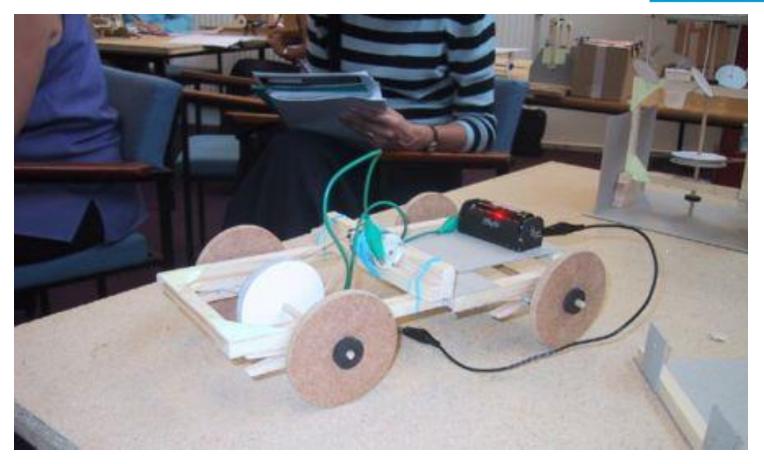








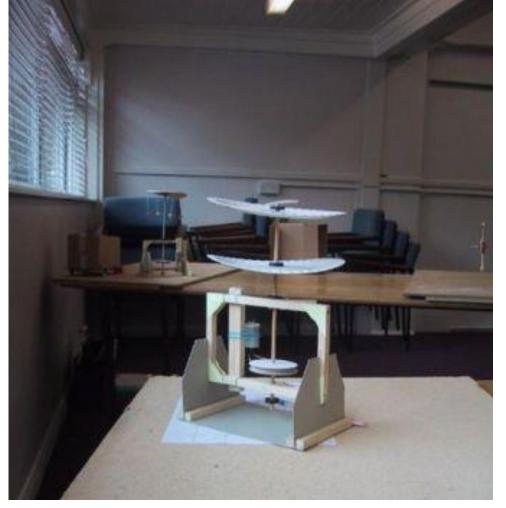








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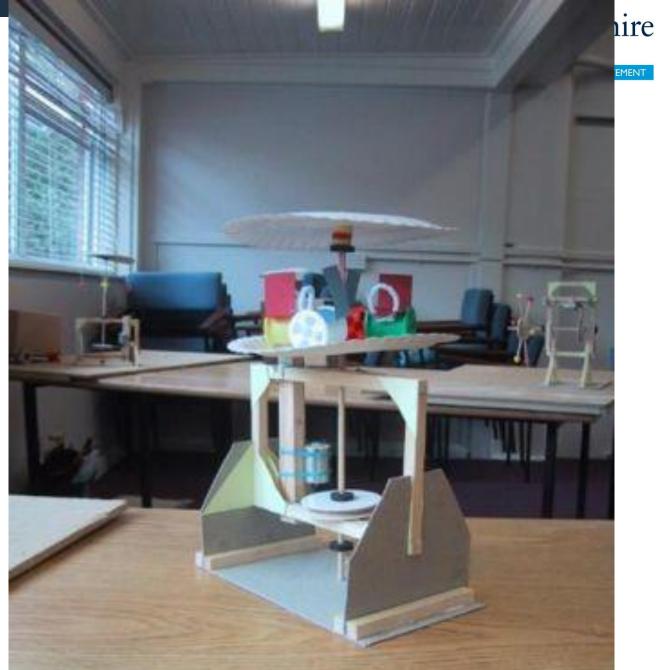






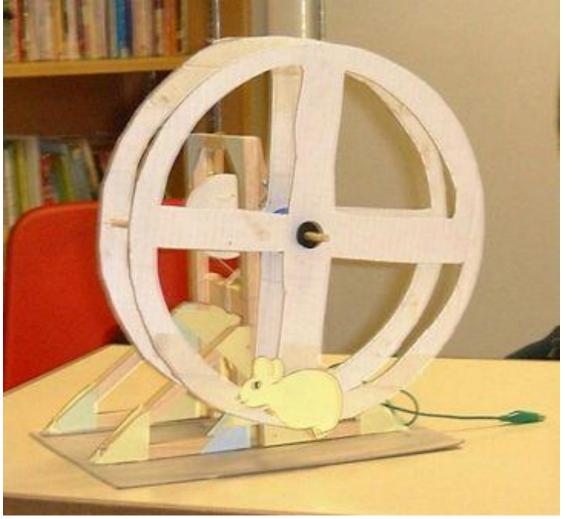










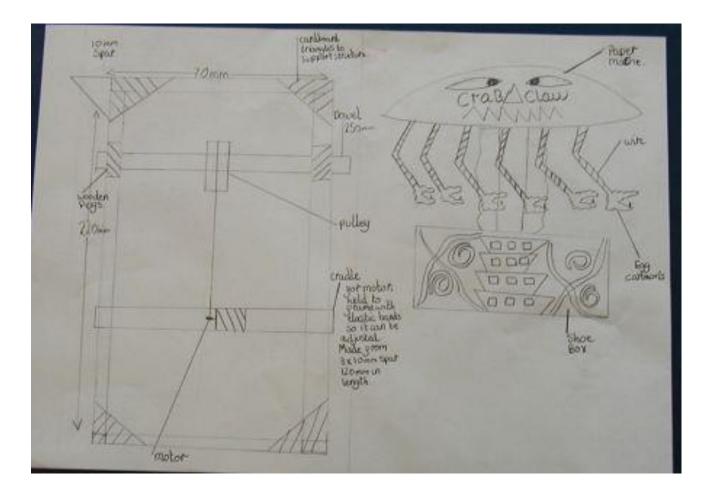








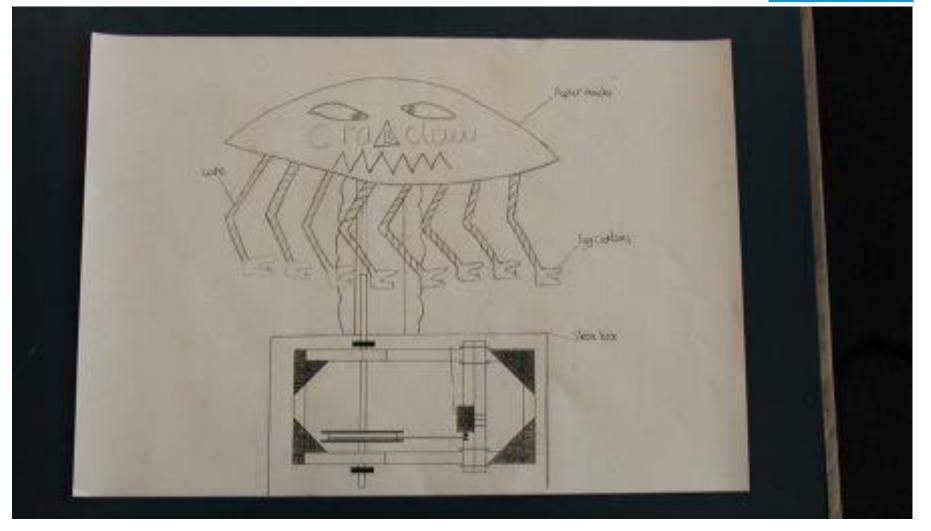






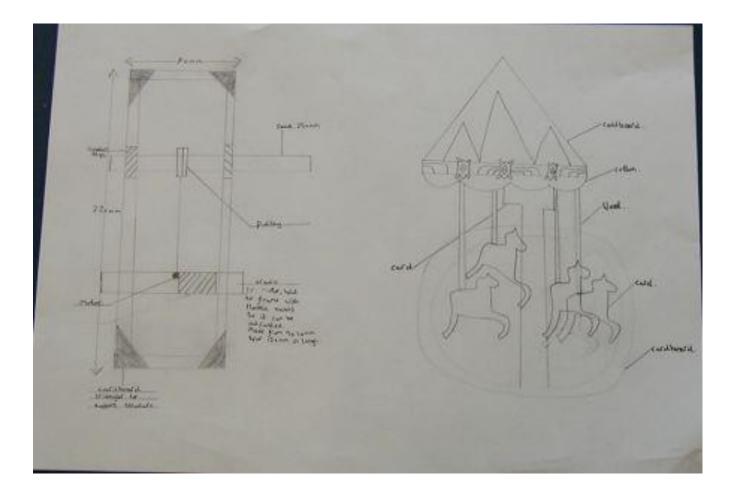


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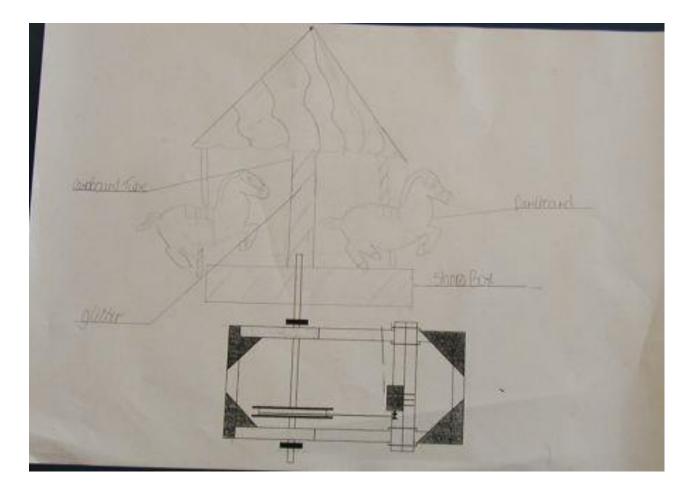






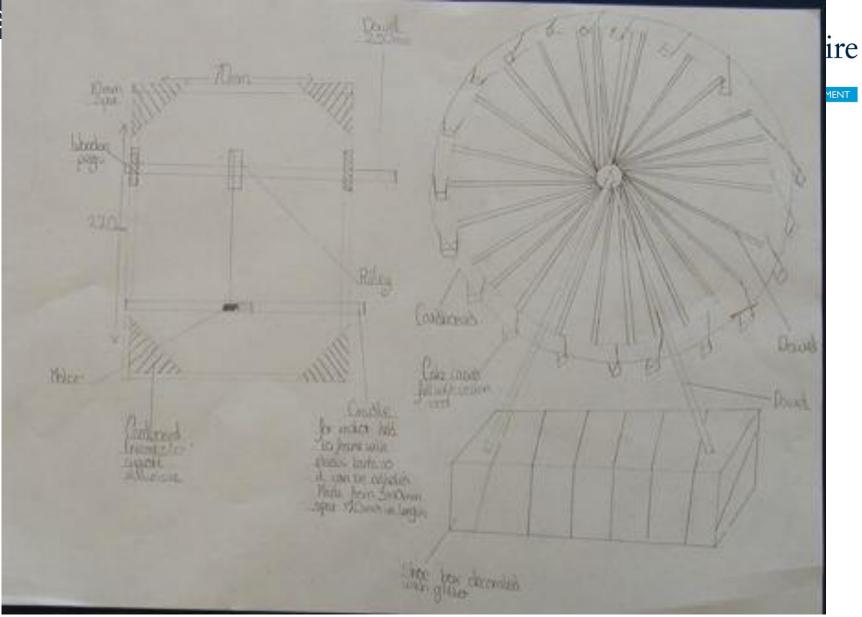






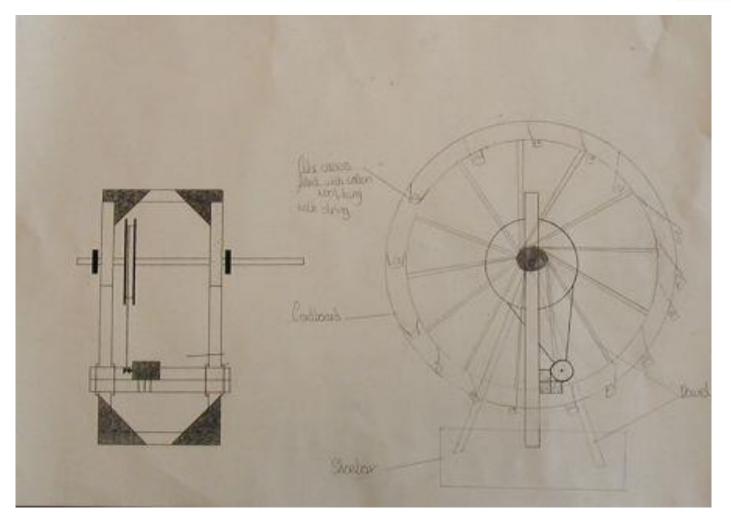
















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