

DESIGN BRIEF: MOVING TOY

Many children's toys are available with moving parts that include both primary and secondary movement, for example, a toy dog with flashing eyes, playing the drums. These toys often include electronics.

You are required to design and construct a moving toy suitable for a 6 to 10 year old child. You will be provided with an electric motor, gears and a crank with which you will create this movement.

In meeting this design brief certain steps are required:

Investigating and designing

- produce three sketches of possible designs
- select the one that you think is the most suitable and under your sketch briefly write a summary of why you chose this one
- list the goals that you want to meet for yourself and those that you want your product to meet
- divide evenly with a pencil line a piece of A3 paper. On one half draw in 3D your design showing
 - a) all moving parts
 - b) the design of the electronic circuit
 - c) the location of the electronic circuit
- investigate and list all the materials and tools that you think you will require to build this design.

Producing

Use tools and available material safely to construct your design.

Analysing and evaluating

During the production phase of your design you will make many design changes to your original idea. Record these changes using words and sketches on the other half of the A3 sheet of paper you used for your original design.

Prepare a report that evaluates your product against the goals that you have already established. You may present this report in a number of different styles, for example, as a written report, PowerPoint presentation, poster or class presentation.