



Unit of work:  
Moving toys

Year group: 2

Prior learning

- Early experiences of working with paper and card to make simple flaps and hinges.
- Experience of simple cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape.

National Curriculum:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment].

Knowledge

- To be able to name understand about James Watt's life.
- To be able to name and explain the purpose of: glue guns, masking tape, scissors, levers, linkages, sliders, wheels and axles.
- To be able to name a range of materials such as: cardboard, paper, paper straws, string and wooden dowel
- To be able to explain how to work safe using DT equipment
- To build structures, exploring how they can be made stronger, stiffer and more stable.

Skills

- To be able to design a product based on a design brief
- To be able to measure accurate and mark where to cut
- To be able to cut accurately and safely
- To be able to create a mock-up and suggest improvements
- To be able to make a product based on a design brief
- To be able to test and evaluate against the design brief.

Vocabulary and definitions

| Word       | Definition  |
|------------|---|
| functional | having a special activity, purpose, or task.  |
| develop    | grow or cause to grow and become more advanced, or elaborate.                           |
| model      | a thing used as an example to follow or imitate   |
| levers     | a rigid bar resting on a pivot, used to move a heavy or firmly fixed load with one end. |
| mock-up    | a model or replica of a machine or structure  |
| linkages   | joining one or materials together   |
| joining    | link; connect.  |
| materials  | the matter from which a thing is or can be made   |
| stronger   | powerful and difficult to resist  |

Significant people: James Watts



James Watt was a Scottish inventor, mechanical engineer, and chemist who improved on Thomas Newcomen's 1712 Newcomen steam engine with his Watt steam engine in 1776, which was fundamental to the changes brought by the Industrial Revolution.

