

Design and Technology- Electrical systems

Key Objectives:

Evaluation of Existing Products

- Investigate similar products to the one to be made to give starting points for a design.
- Draw/sketch products to help analyse and understand how products are made.
- Investigate key events and individuals in Design and Technology.

Focused Tasks

- Use electrical systems such as switches, bulbs and buzzers.
- Develop vocabulary related to the project.
- Use ICT to control products.

Design

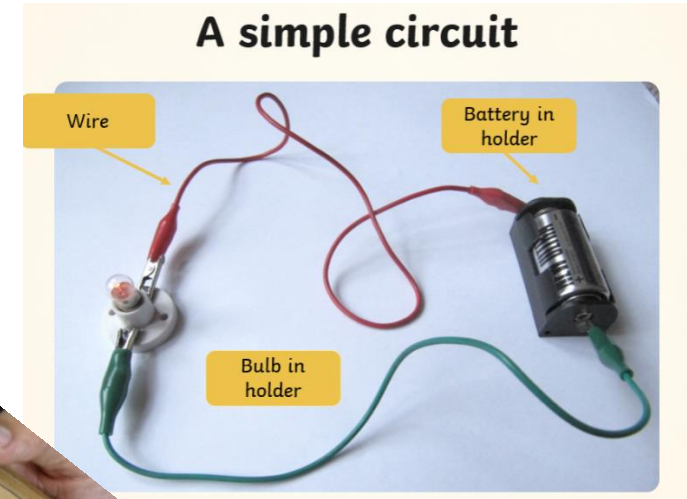
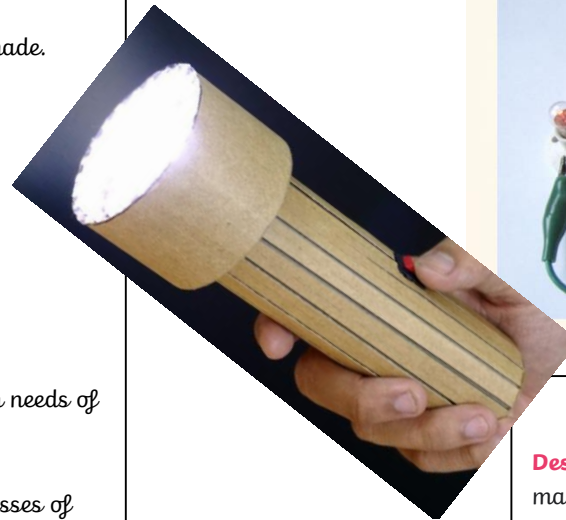
- Develop more than one design or adaptation of an initial design – research needs of user.
- Plan a sequence of actions to make a product.
- Use prototypes to develop and share ideas – identify the strengths/weaknesses of their design ideas in relation to purpose/user.
- Think ahead about the order of their work.
- Decide which design idea to develop; propose realistic suggestions as to how they can achieve their design ideas.
- Consider aesthetic qualities of materials chosen.
- Use CAD where appropriate.

Make

- Select from techniques for different parts of the process.
- Select from materials according to their functional properties.
- Use appropriate finishing techniques.

Evaluation (of Their Finished Product)

- Consider and explain how the finished product could be improved.
- Discuss how well the finished product meets the design criteria of the user.



Key Vocabulary

Design - decide upon the look and function of an object by making a detailed drawing of it

Make - form (something) by putting parts together or combining substances; create

Evaluate - form an idea of the amount, number, or value of; assess

Battery - a container consisting of one or more cells, in which chemical energy is converted into electricity and used as a source of power

Bulb - a light bulb

Wire - metal drawn out into the form of a thin flexible thread or rod

Torch - a portable battery-powered electric lamp