

DT

DT: Mechanical systems- Levers and linkages POP UP CARD PROJECT

Y3

Key Vocabulary

Design brief

Specification

Mechanism

Lever

Box Mechanism

Flaps

Sliders

V fold

pivot, slot, bridge, guide, system, input, process, output, user, purpose, function



Prior Learning

- Know how to design for a client's needs
- Explored and used mechanisms such as flaps, sliders and levers.
- Gained experience of basic cutting, joining and finishing techniques with paper and card.

Key Information

During this topic, children will recap on skills learnt in previous years. They will learn how to generate a card design that meets the client's needs. Children will discuss the brief and think about possible solutions. Children will learn how to make various mechanisms in order to create a 3D pop up feature within the card. The children will understand the basic principles of levers and linkage through experimentation of different mechanisms. Children will learn to order the main stages of making and use tools with some accuracy to cut, shape and join paper and card. Children will decorate and produce one final outcome (pop up card) suitable for a celebration of their choice. Finally, children will use their English skills to evaluate their pop up card against the design brief specification.

Key Skills

- Know how to generate a design idea that fits the brief.
- Know how to use scissors accurately.
- Know how to use hands to fold paper/card
- Know how cutting and folding can create a 3D mechanism and link these to movement of the paper.
- To be able to analyse existing products with mechanisms.