

D&T – Levers and Linkages

Year 3: Summer 1

Key Vocabulary

Mechanism – a device used to create movement in a product.

Lever – a rigid bar which moves around a pivot.

Linkage – the card strips joining one or more levers to produce the type of movement required; it is also used to describe the lever and linkage mechanism as a whole.

Loose pivot – a paper fastener that joins card strips together.

Fixed pivot – a paper fastener that joins card strips to the backing card.

Slot – the hole through which a lever is placed to enable part of a picture to move.

Bridge or guide – a short card strip used to keep lever and linkage mechanisms in place and control movement.

System – a set of related parts or components used to create an outcome.

Linear – arranged in or extending along a straight or nearly straight line.

Rotary – revolving around a centre or axis.

Oscillating - move or swing back and forth in a regular rhythm.

Reciprocating - responding to an action by making a corresponding one.

Key Questions

- How will you make the product move?
- How do you think the mechanism works?
- Which lever and linkage mechanism will work best?
- What does the type of movement remind you of?



Key Skills

- Use annotated sketches and prototypes to develop, model and communicate ideas.
- Select from and use appropriate tools with some accuracy to cut, shape and join paper and card.
- Understand and use lever and linkage mechanisms.
- Distinguish between fixed and loose pivots.
- Know and use technical vocabulary relevant to the project.
- Select from and use finishing techniques suitable for the product they are creating.
- Evaluate their own products and ideas against the design criteria and user needs, as they design and make.

Concepts

Designing - A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made. The designer must consider the purpose and the intended user of the product being created.

Technical knowledge - an understanding of modern technology, its working and advances. Your detailed understanding of anything that can be applied or reasoned with in any shape or form for any issues or applications.

Website Links

<https://www.youtube.com/watch?v=YIYEi0PgG1g>

<https://www.bbc.co.uk/bitesize/guides/zvfhsrd/revision>

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