

Knowledge Organiser

Subject: D.T

Topic: Moving books

Key Knowledge

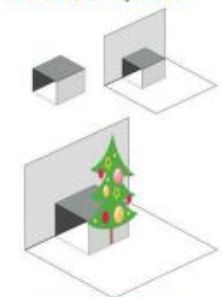
What knowledge do I need to know by the end of this topic?

1. Key mechanisms and their movements:

Lever and linkage mechanisms usually produce oscillating or reciprocating movement:

-  Linear - in a straight line
-  Reciprocating - backwards and forwards in a straight line e.g. a slider
-  Rotary - round and round e.g. a wheel, con, pulley, gear wheel
-  Oscillating - backwards and forwards in an arc e.g. a lever

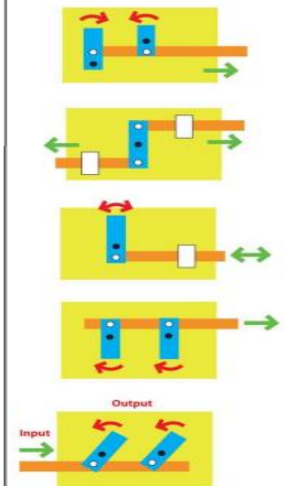
Making a pop-up from a small section of a recycled box:



1. Cut a slice off a small box.
2. Glue two sides to the paper.
3. Stick a picture to pop up on the front.

Teaching aids to demonstrate levers and linkages

- Fixed pivot
- Loose pivot



When you push the card strip (input movement), the two levers move (output movement).

Key Vocabulary **What vocabulary do I need to know and be able to use?**

- Mechanism** - a device used to create movement in a product.
- Lever** - a rigid bar which moves around a pivot. Levers are used in many everyday products.
- Linkage** - the card strips joining one or more levers to produce the type of movement required.
- Slot** - the hole through which a lever is placed to enable part of a picture to move.
- Guide or bridge** - a short card strip used to keep lever and linkage mechanisms in place and control movement.
- Loose pivot** - a paper fastener that joins card strips together.
- Fixed pivot** - a paper fastener that joins card strips to the backing card.

Key Skills **What skills do I need to show by the end of this topic?**

- problem-solving teamwork negotiation
- consumer awareness organisation motivation
- persuasion leadership perseverance/resilience

Key Questions

What questions do I need to be able to answer by the end of this topic?

- Who is this designed for?
- What is the purpose of the design?
- What mechanism have you chosen? (Use key vocabulary to explain/describe).
- Can you explain how the mechanism works?
- Have you had to overcome any problems?
- How could you improve your project if you were to repeat it?

Curriculum Links

What links will this topic have with other areas of the curriculum?

- PSHE - teamwork
- English - Story writing, images for books

Wider Reading

Where might I find out more about this topic?

- Examples of mechanical books - lift flap books.
- Children look at examples from home and in school during first few weeks.