

# In DT we are learning about... Mechanisms -Can you make an information book for a KS1

## 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. The term 'linkage' is also used to describe the lever and linkage mechanism as a whole.
- 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.
- System** - a set of related parts or components used to create an outcome.
- Purpose** - How your product is going to be used
- Audience** - Who is going to be using your product

### Characteristics needed for this topic:

- Imagination
- Perseverance
- Making links



## child to educate them about light?

### Sticky knowledge and skills



- Levers and linkages are mechanisms that make things move.
- The 'input' is where the user pushes or pulls a card strip.
- The 'output' is where one or more parts of the picture move.
- Lever and linkage mechanisms usually produce oscillating and or reciprocating movement.
- I can create a product with a simple lever and linkage.
- I can design an attractive and interesting product that meets the needs of my audience and has a clear purpose.
- I can prove that it meets a specific design criteria.
- I can use ideas from existing products to inform my design.
- I can produce a plan and explain the use of chosen materials. (based on their properties), equipment and processes.
- I can choose the correct tools for the task and show knowledge of handling basic tools .
- I can mark and measure using a ruler and cut accurately using scissors.
- I know how to strengthen a product by stiffening a given part or reinforce a part of a structure.
- I can persevere and adapt work when original ideas do not work (year 4) and I can evaluate a finished product for its purpose and appearance and suggest improvements.

### Links to previous learning

- Some knowledge of simple mechanisms
- Creating a simple slider
- Using fastener to attach paper
- Using a pencil/paintbrush, scissors, ruler and a hole punch (with adult supervision)

### Key Designers

Children's picture books with levers e.g. Jane Wolfe - Pull the Lever books  
Children's information books about light

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, cam, pulley, gear wheel
- Oscillating - backwards and forwards in an arc e.g. a lever

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

### Aspirations

- Children's Book Publisher
- Mechanical Engineer
- Control and Instrumentation Engineer
- Occasion Card Making