



# Stories in motion

Key Vocabulary	Definition
Rigid	Something that is strong and that will not bend.
Pivot	A fixed part that holds a lever in place as it turns.
Lever	A rigid bar which moves around a pivot.
Slider	A rigid bar which moves backwards and forwards in a straight line.
Flap	A folded cover that can be lifted up to show a hidden area.
Slot	A wide, thin hole that allows a slider to move.
Guide	A short strip of card that keeps sliders in place and controls movement.
Mechanism	A device used to create movement in a product.

## Six principles of quality DT:



- User- *who is it for?*
- Purpose- *What is it for?*
- Functionality- *How will it work?*
- Design decisions- *What should it do/look like?*
- Innovation- *Try something different*
- Authenticity

The Design Process																									
Design Brief	Design Criteria	Generating Ideas	Prototype	Make the Product	Evaluation																				
<p>A planning document that explains <b>what</b> the project is, <b>how</b> it will be achieved and the <b>time frame</b> that it needs to be made in.</p>	<p>Tells you what a product must do to be successful.</p>	<p>Exploring different products and thinking about how they could be adapted. Creating an annotated sketch of your idea.</p>	<p>The first example of what the real thing will look like. It is used for testing, development and evaluation.</p>	<p>Using the annotated sketches and prototypes to help create your product.</p>	<p>Checking that the product meets the design criteria and has achieved its purpose.</p>																				
<p><b>Design Brief</b></p> <p><b>Setting the scene</b> We use the recycling bins of North City Council. We want to help you get the most out of your recycling services by highlighting all of the items that can be recycled but sometimes get overlooked.</p> <p><b>Detailing the project</b> To help promote recycling we would like you to design a moving poster to help encourage recycling and explain which items from the home can be recycled, what they can be recycled into and the benefits of recycling.</p> <p>The poster will be aimed at getting families involved in recycling.</p> <p>The project will be completed within 6 lessons.</p>	<table border="1"> <thead> <tr> <th>Priority</th> <th>Design Criteria</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Priority	Design Criteria												<table border="1"> <thead> <tr> <th>Design criteria</th> <th>Evaluation</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Design criteria	Evaluation								
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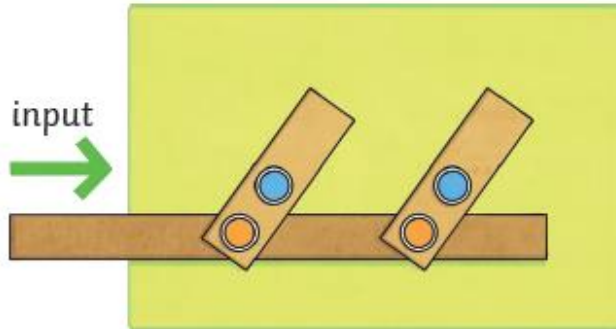
## Simple mechanisms move...



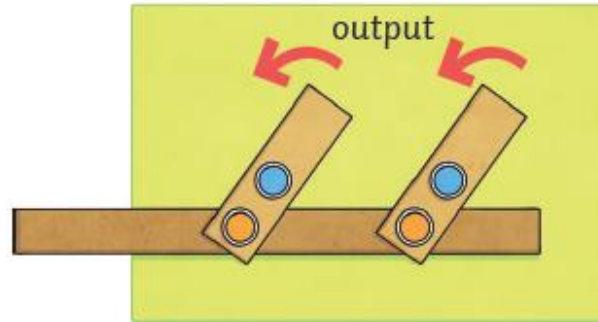
## Exploring Mechanical Systems

Many **mechanisms** take one type of **input motion**, and **output** it as a different type of **motion**.  
In lever and linkage **mechanisms**:

**Input** - The movement of the main lever by the user.

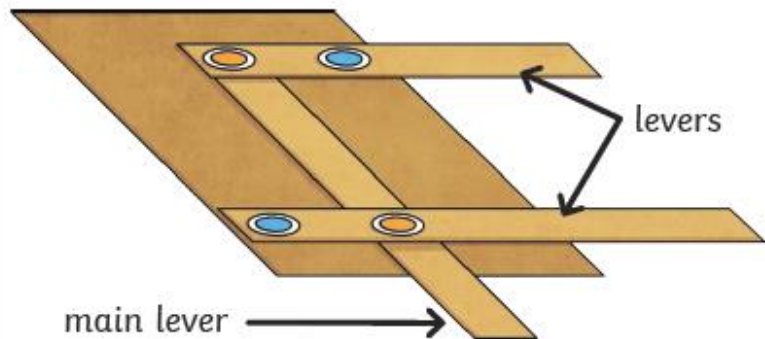


**Output** - The movement that is made by the smaller levers.



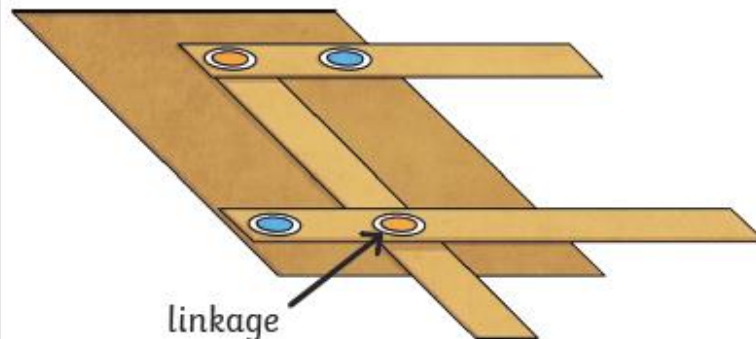
## Lever

The simplest type of **mechanism**. A lever is a stiff bar which moves around a **pivot**.



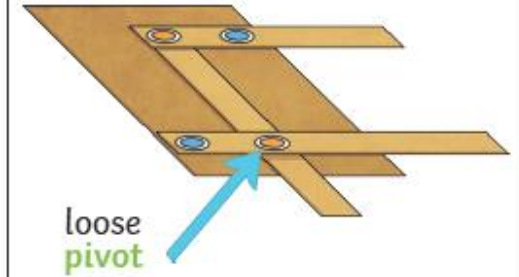
## Linkage

The part of the **mechanism** used to join one or more levers to produce the type of movement required.



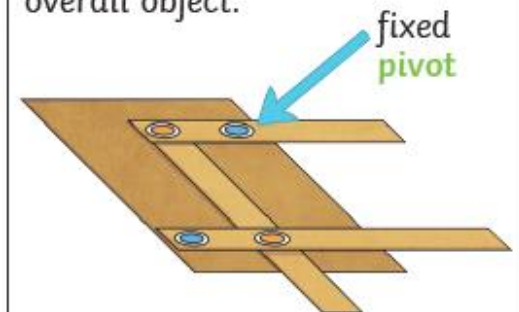
## Loose Pivot

Joins the levers together.



## Fixed Pivot

Joins the levers to the overall object.



## PEAR SHAPED CAM

SLIDE → By V.Ryan

FLAT FOLLOWER →

CENTRE OF ROTATION

