

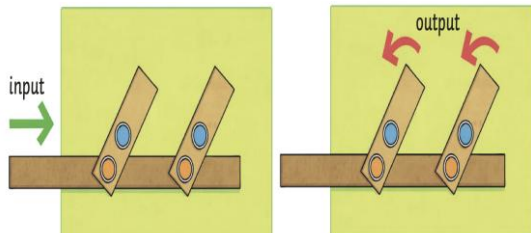


Year 3 & 4 DT Knowledge Organiser

Mechanisms – Levers and Linkages

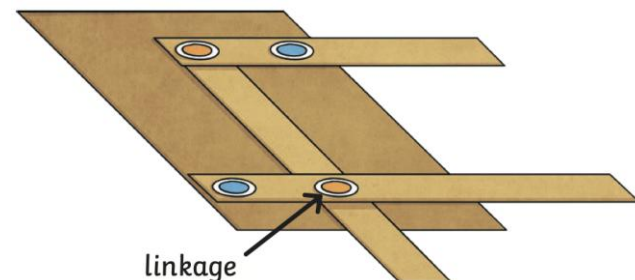
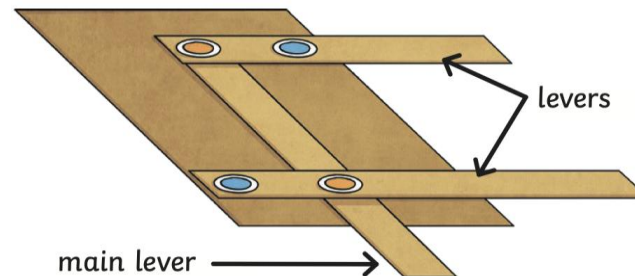
Vocabulary Recap

lever	A rigid bar that moves around a pivot
pivot	A fastener that joins levers and linkages together
Key Vocabulary	
linkage	a mechanism which is made by connecting levers together through pivot points (joints)
input	the motion used to start a mechanism moving
output	a movement that happens because of the input
guide	a short strip used to keep lever and linkage mechanisms in place and control movement
mechanism	a device used to create movement in a product



Sticky Knowledge

- A **linkage** connects two or more levers.
- A **guide** controls the direction of an output.
- We control the **input** to make a **mechanism** work.
- The **output** is the end movement of the mechanism.



Key Skills

Prior learning:

- Explored and used mechanisms such as flaps, sliders and levers.
- Gained experience of basic cutting, joining and finishing techniques with paper and card.

Designing

- Generate realistic ideas and their own design criteria through discussion, focussing on the needs of the user.
- Use annotated sketches and prototypes to develop, model and communicate ideas.

Making

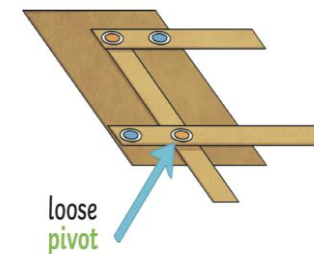
- Order the main stages of making.
- Select from and use appropriate tools with some accuracy to cut, shape and join paper and card.
- Select from and use finishing techniques suitable for the product they are creating.

Evaluating

- Investigate and analyse books and, where available, other products with lever and linkage mechanisms.
- Evaluate their own products and ideas against criteria and user needs, as they design and make.

Loose Pivot

Joins the levers together.



Fixed Pivot

Joins the levers to the overall object.

