



What ? (Key Vocab)

| Spelling | Definition |
|----------------------|--|
| Mechanical structure | Something which uses related components to make a movement |
| motion | Movement from one place to another |
| pivot | To turn on a central point |
| Input | The movement of the main lever |
| Output | The movement made by smaller levers |
| Lever | A stiff bar which moves around a pivot |
| Linkage | The part of the mechanism used to join one or more levers |
| Loose pivot | Joins levers together |
| Fixed pivot | Joins levers to the overall product |
| design | A plan or drawing to show the look and function of something |
| annotate | Adding notes to explain something |
| prototype | First design |

Possible experiences

Study a variety of moving books

Prior Knowledge

- Using sketch books to research designs
- Measuring using rulers
- Beginning to annotate your ideas
- Following a plan
- Choosing materials from options
- Evaluate your product

Diagrams and Symbols

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.

Loose Pivot

Joins the levers together.

Fixed Pivot

Joins the levers to the overall object.

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.