

Key Objectives:

- Investigate similar products to the one to be made to give starting points for a design.
- Decide which design idea to develop.
- Develop vocabulary related to the project.
- Plan a sequence of actions to make a product.
- Record the plan by drawing using annotated sketches.
- Think ahead about the order of their work and decide upon tools and materials.
- Select from a range of tools for cutting, shaping, joining and finishing.
- Select from materials according to their functional properties.
- Consider and explain how the finished product could be improved.

Key Vocabulary

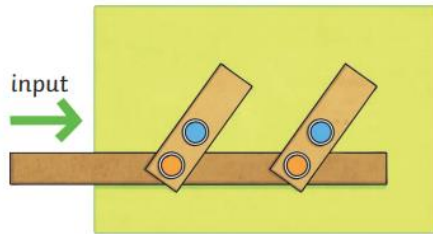
mechanism/ mechanical systems	Something that uses related components which act together to create a movement.
motion	Movement from one place to another.
pivot	To turn on a central point.

Exploring Mechanical Systems

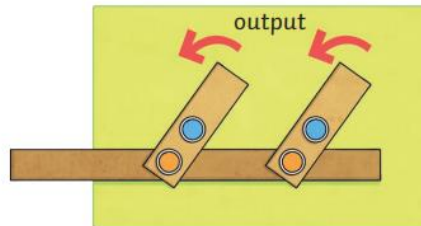
Many **mechanisms** take one type of **input motion**, and **output** it as a different type of **motion**.

In lever and linkage **mechanisms**:

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

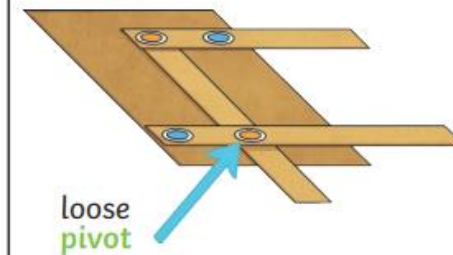


Output - The movement that is made by the smaller levers.



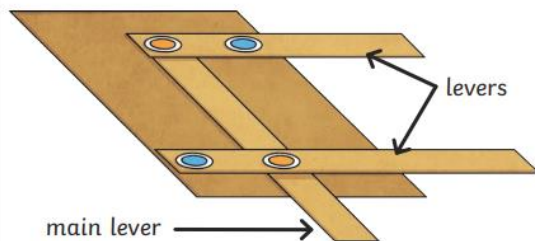
Loose Pivot

Joins the levers together.



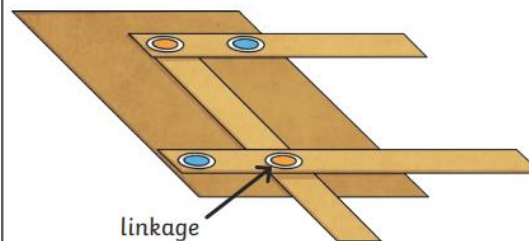
Lever

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.



Fixed Pivot

Joins the levers to the overall object.

