

Year 1 DT Knowledge Organiser – Mechanical Systems: Moving Minibeasts

Safely use and explore a variety of tools and techniques in food preparation.

Select from a range of tools to design and create a stable structure.

Key Vocabulary

- **Mechanism** – a device used to create movement in a product.
- **Design** – to make or draw plans for a product.
- **Evaluate** – the process of deciding if you've done something the best way, and looking at what could be improved.
- **Tool** – a device, usually hand-held, that is used to carry out a function.
- **Lever** – a rigid bar that rests around a pivot. They are used in many everyday products.
- **Slider** – a rigid bar which moves backwards and forwards along a straight line. Unlike a lever, a slider does not have a pivot point.
- **Guide** or **bridge** – a short card strip used to keep sliders in place and control movement.
- **Slot** – the hole through which a lever or slider is placed to enable a part to move.
- **Wheel** – a circle-shaped device that allows things to roll.

Key Skills

Designing

- To design purposeful and appealing products.
- To develop and communicate ideas through talking, drawing, templates and mock-ups.

Creating

- To select and use a range of tools and equipment to carry out practical tasks, e.g. cutting, shaping, joining and finishing.
- To explore and use mechanisms, e.g. levers, sliders, wheels and axes in products.

Evaluating

- To evaluate ideas and products based on design criteria.

Mechanical Systems

Simple mechanisms move:

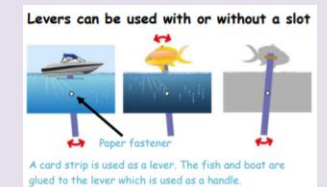
- in a straight line
- in a straight line, backwards and forwards
- round and round
- in a curve

Tools

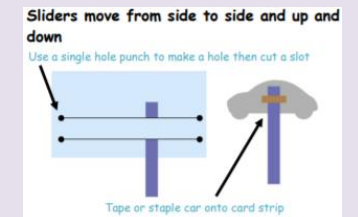
- Paper and card
- Pencil
- Scissors
- Split pins



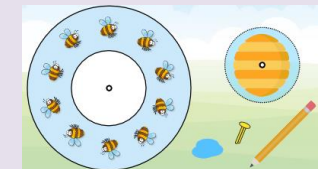
Levers



Sliders



Wheels



Timeline

Look at models of mechanisms.

Learn how to create a wheel mechanism.

Make a minibeast-themed moving picture.

Learn how to use levers and pivots to create a moving mechanism.

Design a picture with a moving mechanism.

Evaluate our moving pictures.