

Year 2 Knowledge Organiser Mechanisms – Making a Moving Monster



Key Knowledge – Mechanisms and Motion

Mechanisms

Mechanisms are all around us! They are the parts that make something work. Most objects that help us in our lives are made up of mechanisms.

Motion

Mechanisms produce motions. There are four basic types of motion:

 Linear – movement in a straight line in one direction like a train on a track.



- Reciprocating movement in a straight-line back and forth like a paper cutter (guillotine).
- **Rotary** movement in a circular motion like clock hands.





 Oscillating – movement along a part of a circle like a clock pendulum.

Key Knowledge – Levers, Linkages and Pivots

Levers

Levers are mechanims that help things move. A seesaw is an example of a lever mechanism.

Seesaws are a narrow board supported by a fulcrum in the middle. As one end goes up, the other goes down.

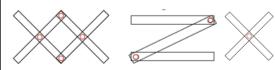


Pivots (fulcrum)

A pivot is a central point from where something can turn. It is very important as it allows the seesaw to move. They use a fulcrum to make the seesaw pivot and move.

Linkages

Linkages use levers and pivots to create motion. Below are examples of linkages that you will explore.



Vocabulary	
Linkage	A linkage is a system of levers that are connected by pivots.
Lever	A lever is something that turns on a pivot.
Pivot	Central point from where something can turn
Fulcrum	A pivot point around which a lever rotates.
Motion	Movement or change in position. There are 4 basic types of motion.
Mechanism	Mechanisms are a collection of moving parts that work together in a machine.
Mechanical	Items that have moving parts are mechanical like toy cars and hole punchers.
Non-mechanical	Items that don't have moving parts are non-mechanical like teddy bears.
Template	A model that you can copy or will give you ideas.
Diagram	A simplified drawing showing the appearance, structure, or how something words.