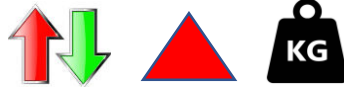


Mechanisms

A **mechanism** is a device that transforms input forces and movement into a desired set of output forces and movement.

Lever

There are 3 parts to a lever (Effort, Fulcrum , Load)

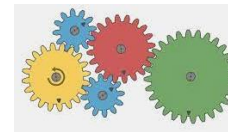


There are 3 classes of lever, each has the three parts of a lever in different places

Class 1	Sack trolley, seesaw	
Class 2	Wheelbarrow	
Class 3	Tweezers, fishing rods	

Gears

Gears are toothed mechanical parts that are used to transfer motion and power. They can be used to change the speed, torque and direction



Spur gears	Spur gears mesh together, the gear that is connected to the input is called the driver gear, the other gear is called the driven	
Compound gears	A number of gears fixed together, they rotate at the same speed	
Bevel Gears	Change the axis of rotation	

Cams

Cams are mechanical devices that turn the rotational movement of a shaft into reciprocating or linear movement. They have 2 main parts, the CAM and the FOLLOWER.



Eccentric cam	Steady even paced rise and fall	
Pear cam	Stationary for a while and then slow rise and fall	
Drop cam	Creates a slow rise but sudden drop	

Types of movement

Rotary	Linear	Oscillating	Reciprocating
A movement following a circular path, around a fixed point 	Linear motion is movement in a straight line and in one direction 	Oscillating motion occurs when an object swings from a fixed point. 	Reciprocating motion is a repetitive movement left to right OR up and down 