

Making It Move

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Different mechanical systems can be used to make an object move. The parts of a machine that create movement are called mechanisms. Mechanisms include sliders, levers, linkages, wheels, axles and cams.

Sliders

Sliders move from side to side or up and down. Bolts use a slider mechanism.



Levers

Levers consist of a rigid bar that rotates around a fixed point called a fulcrum or pivot. A seesaw is an example of a lever mechanism.



Linkages

Linkages combine the slider and lever mechanisms. They are made from bars joined with pivots. A scissor lift uses a linkage mechanism.



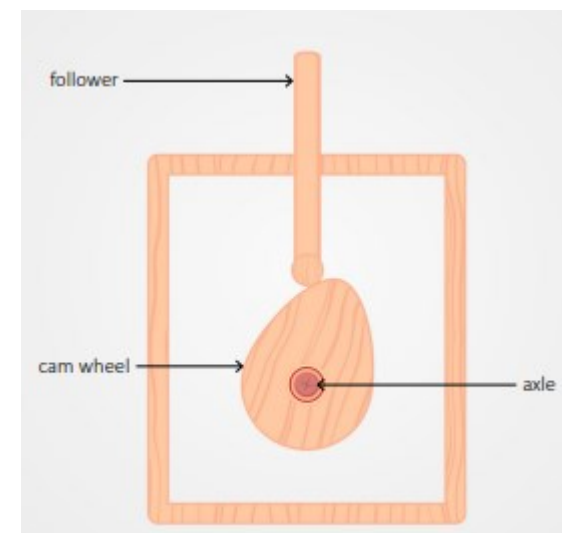
Wheels and Axles

Axles are rods which allow wheels to rotate to help a vehicle move easily. Wheels and axles are used on cars and pull-along carts.

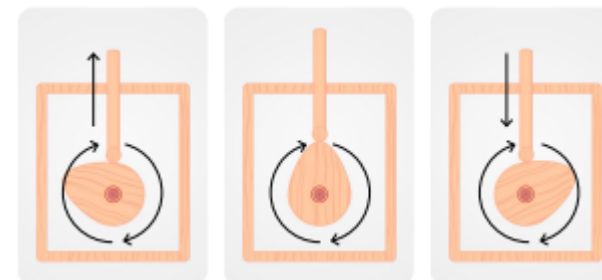


Cam Mechanism

A cam mechanism is used to change rotational movement into up and down movement. It consists of three parts: a cam wheel, an axle and a follower.



When the axle turns, the cam wheel rotates. This makes the follower that rests on the cam wheel move up and down, following the shape of the wheel's edge. Cam's can be different shapes too.





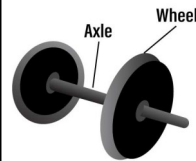
Automaton Toy

Automata are mechanical objects or models that can be relatively self-operating. They often contain a range of cam mechanisms that create movement.



Glossary

Automaton Toy: A moving device usually constructed to look like a human or animal figure.



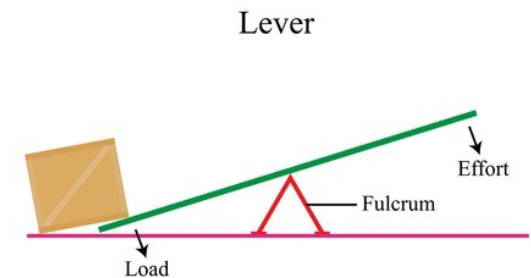
Axle: Rods which allow wheels to rotate to help a vehicle move easily.

Cam: A mechanism used to change rotational movement into up and down movement.

Follower: Part of a mechanism that follows the movement of another part.

Fulcrum: The point where a lever is placed.

Lever: A rigid bar that rotates around a fixed point called a fulcrum or pivot.



Mechanism: A system of parts that work together in a machine.

Motion: Movement.

Slider: A mechanism that moves from side to side or up and down.

