Grade 4.

Science and Technology.

5. Force and Energy.

5.5 Machines.

A machine is a tool that makes work easier.

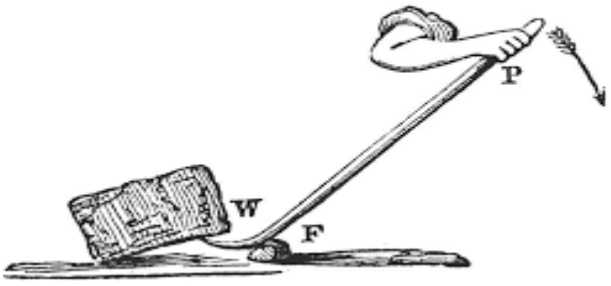
5.5.1 Levers.

A lever is a simple machine that consists of a rigid bar or beam that is capable of rotating around a fixed point called a fulcrum. It is one of the basic machines that can be used to multiply or change the direction of a force.

A lever functions by applying a force, known as effort, at one point on the bar to overcome a resistance or load at another point. The fulcrum acts as the pivot point or axis of rotation.

Importance of levers:

- Levers change direction of force.
- Levers amplify force making work easier.



5.5.2 Parts of a Lever.

Fulcrum: The fixed point around which the lever rotates or pivots. It is labeled (P) in the above diagram.

Effort: The force applied to the lever to make it move or perform work, It is labeled (E) in the above diagram.

Load: The object or resistance being moved or lifted by the lever. It is labelled (W) in the above diagram.