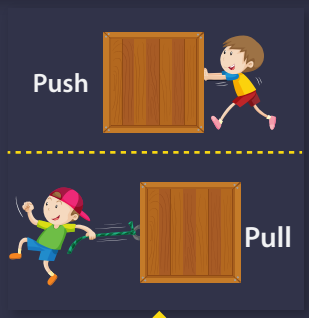
Force and Pressure

toppr

Force
Either a push or a pull

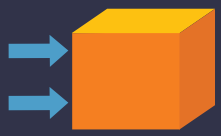
It can do
- Change in the state of motion of an object
- Change in the shape of an object

It has direction as well as magnitude



Types of force
- Contact
  - **Mascular**: Due to action of muscles
  - **Friction**: Act on all moving objects and opposite direction of motion
- Non-contact
  - **Magnetic**: Force that attracts certain metal objects towards a magnet
  - **Electrostatic**: Force exerted by a charged body on another charged or uncharged body
  - **Gravitational**: Objects fall towards earth due to its pull

Net force
$F = F_1 + F_2$



Net force
$F = F_1 - F_2$

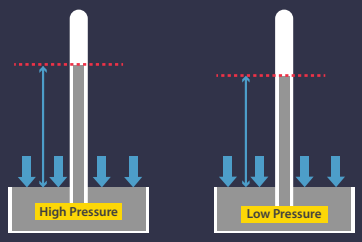
Atmospheric Pressure
Pressure exerted by atmospheric air

Rubber Sucker

Pressure
Force acting per unit area

It exerted by liquids and gases

Greater the height of water column, greater is the pressure exerted



Pressure Of Atmosphere On head

Pressure exerted by atmospheric air