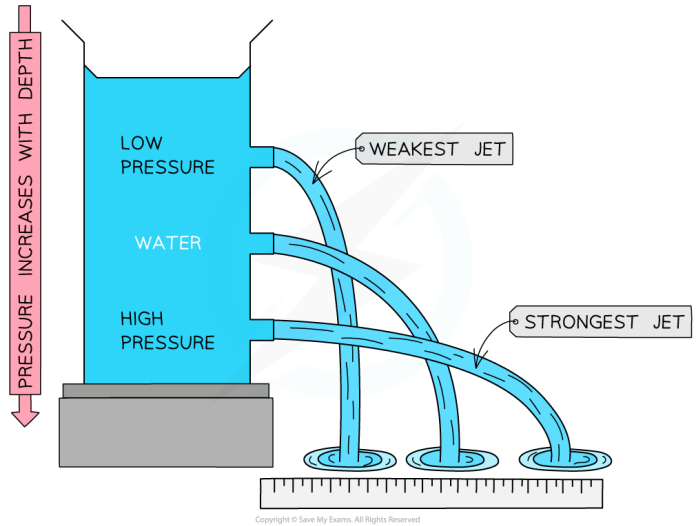
Year 8 Motion and Pressure Knowledge Organiser

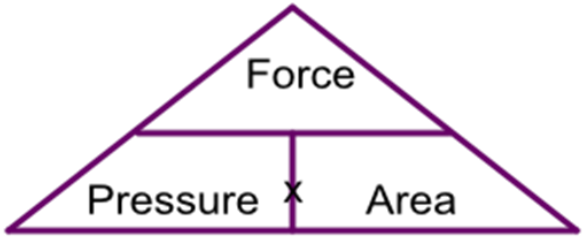
1.Keyword	Definition
Pressure	Force divided by area
Density	The mass per unit of volume of a substance
Moment	Turning force around a pivot

2. Pressure in liquids

Acts in all directions



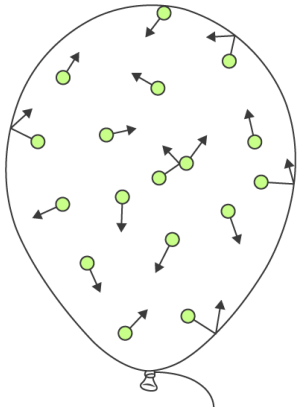
Pressure (N/m^2) = Force (N) / Area (m^3)



2. Pressure in gases

Affected by changes in volume and in temperature
Increase temperature increases pressure
Decreasing volume (but not mass of gas) increases pressure

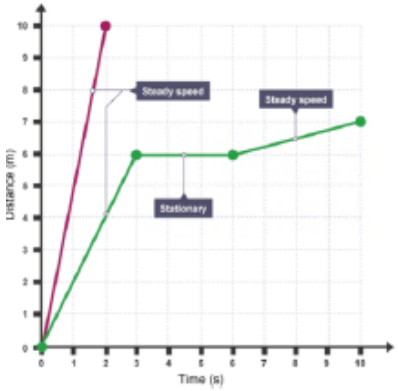
Movement of Gas Particles in a Container



When gas particles collide with the inside walls of their container, they cause pressure.

Distance Time Graphs

A distance time graph is a useful way to represent the motion of an object. It shows ho the distance move from a starting point changes over time.



If the line is horizontal, the object is stationary (because the distance stays the same).
If the line is a straight diagonal, the object is moving at a constant speed.

The steeper the line, the greater the gradient and the greater the speed.

3. Motion keywords

Accelerate	Speeding up
Decelerate	Slowing down
Constant speed	Staying the same speed
Stationary	Not moving