Section 10.1 – Mixtures of Gases

1. Gas particles at independently of each other
2. Pressure is the result of particles colliding with the sides of the container

Dalton's Law of Partial Pressures

Total Pressure of a container is the result of all the pressures of each gas added together.

$P_T = P_1 + P_2 + P_3 \ldots$

- If you know the mole ratio of the mixture then you can calculate the pressure of each gas and vice versa.

Applications of Partial Pressures

1. Breathing – pressure not amount of O_2
2. Collecting gas by water displacement
    - Need to subtract vapour pressure of water before beginning calculations for the gas collected
    - Page 464 – sample problem