



Vocabulary: Equilibrium and Pressure



Vocabulary

- Dalton's law – a law stating that the total *pressure* exerted by a mixture of gases is equal to the sum of the *partial pressures* of the individual gases.
 - For example, if an air tank contains oxygen with a partial pressure of 2.0 MPa (megapascals) and nitrogen with a partial pressure of 3.0 MPa, the total pressure is 5.0 MPa.
- Le Châtelier's principle – a principle stating that a chemical equilibrium will tend to adjust to counteract any imposed changes.
 - For example, if the pressure on an equilibrium gas mixture is increased (thus reducing volume), the equilibrium will shift in favor of the side with fewer gas molecules.
- Partial pressure – the pressure exerted by a single gas in a mixture of gases.
 - The partial pressure of a gas in a mixture is equal to the pressure the gas would exert by itself.
- Pressure – a force exerted on a given area.
 - Gases exert pressure on the walls of their container.
 - In the *Equilibrium and Pressure Gizmo*[™], pressure is measured in megapascals (MPa). One megapascal is about ten times atmospheric pressure (1.0 atm = 0.101325 MPa).

