

Limitation of Henry's Law

- (i) This law not valid when pressure is too high
- (ii) This law is not valid when ~~press~~ temp is too low
- (iii) Gas should not react with solvent. i.e. law is not applicable when gas reacts with solvent.
- (iv) It is not obeyed when gas is highly soluble due to reaction of gas with solvent. hence suitable for solubility of gas in non ionizing solvent.

3/11/20

Application of Henry's law

(i) Solubility of CO_2 in water in soft drink is ~~not~~ using high pressure

Low P \rightarrow low solubility

(ii) High P \rightarrow high solubility

Low concentration of O_2 in blood & tissues at higher altitude due to low pressure at higher level than ground level.

\rightarrow It causes anoxia which causes thinking capacity in human

(iii) Deep sea divers (Scuba divers)

uses compressed air for breathing

under water. compressed air is more soluble with blood & tissue.

& used in metabolism ~~is~~. Except ~~the~~ N_2 unreacted.

Therefore Decompression Sickness or bends = muscle pain, joint pains are caused due to evolution of N_2 when comes at surface level at normal pressure.