CONCEPT: INTRO TO HENRY'S LAW

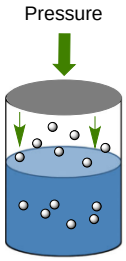
- The solubility of a dissolved gas is _____ proportional to the partial pressure of that gas over the liquid.

Henry's Law

Pressure–Solubility Relationship

As the **Pressure** ____ the solubility of a gas _____.

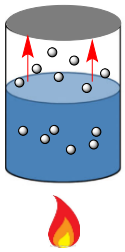
☐ Changes in Pressure have _____ effect on solids or liquids.



Temperature–Solubility Relationship

As the **Temperature** ____ the solubility of a gas _____.

☐ As the Temperature ___ the solubility of solids ___.



EXAMPLE: In general, as the temperature increases, the solubility of a gas in a given liquid _____, and the solubility of most solids in a given liquid _____.

a) Increases, increases

b) Decreases, increases

c) Increases, decreases

d) Decreases, decreases

PRACTICE: Which of the following is true for the solubility of KBr (s) and $CH_3(CH_2)_3CH_3$ (g) in water?

a) Decreasing the temperature will decrease the solubility of $CH_3(CH_2)_3CH_3$.

b) Increasing the pressure will decrease the solubility of KBr.

c) Both KBr and $CH_3(CH_2)_3CH_3$ are completely soluble in water.

d) Both are insoluble in water.

e) None of the above.