**CONCEPT:** INTRO TO HENRY'S LAW

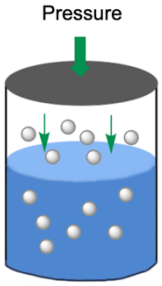
- The solubility of a dissolved gas is _____ proportional to the partial pressure of that gas over the liquid.

## Henry's Law

### Pressure–Solubility Relationship

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

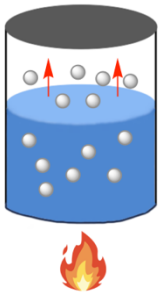
☐ Changes in Pressure have _____ effect on solids or liquids.




### 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 NaCl (s) and $CH_4$ (g) in water?

a) Increasing the temperature will increase the solubility of $CH_4$.

b) Increasing the temperature will decrease the solubility of NaCl.

c) Both NaCl and $CH_4$ are quite soluble in water.

d) Neither NaCl nor $CH_4$ are soluble in water.

e) None of the above.