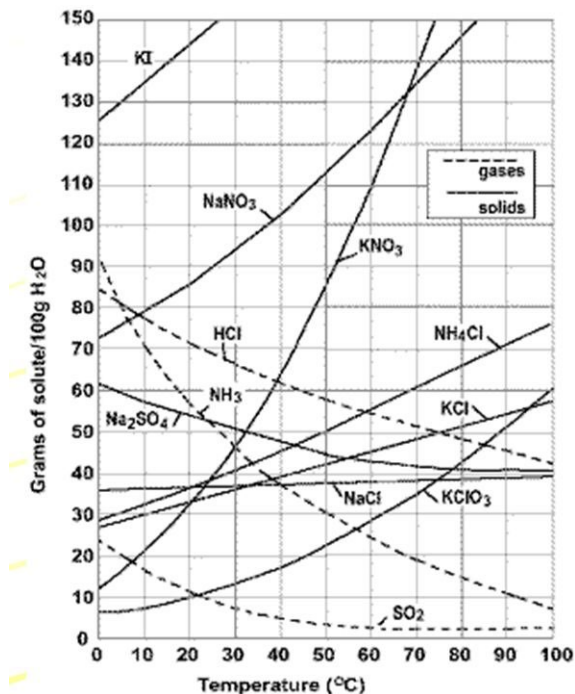


Solutions Study Guide

Solubility Chart



What happens to the solubility of most substances on the graph as the temperature of the water increases?

Identify three substances whose solubility decreases as the temperature increases.

Hydration

Sketch a sodium ion (Na⁺) surrounded by water molecules:

Sketch a chloride ion (Cl⁻) surrounded by water molecules:

Colligative Properties

Sketch a thermometer on the back. Mark 0°C and 100°C on it. Leave room above and below those marks.

As the amount of solute dissolved in water increases, the boiling point of the water _____
This is called boiling point _____.

Show this on your thermometer.

As the amount of solute dissolved in water increases, the freezing point of the water _____
This is called freezing point _____.

Show this on your thermometer.

Electrolytes and Nonelectrolytes

Sort the following substances into the category to which they belong:

Acids Bases Salts Sugar Ethanol Water

Electrolytes:

Nonelectrolytes:

Like Dissolves Like

Give examples of substances that will dissolve in water and those that would dissolve in a nonpolar solvent like gasoline.

Dissolves in water, a _____ solvent:

Dissolves in gasoline, a _____ solvent: