

Topic Introduction



Summarize your understanding of each paragraph.

An aqueous solution is a solution in which the solvent is water. It is usually shown in chemical equations by appending (aq) to the relevant chemical formula. For example, a solution of table salt, or sodium chloride (NaCl), in water would be represented as $\text{Na}^+(\text{aq}) + \text{Cl}^-(\text{aq})$.

The word aqueous means pertaining to, related to, similar to, or dissolved in water. As water is an excellent solvent and is also naturally abundant, it is a ubiquitous solvent in chemistry.

Substances that are hydrophobic ('water-fearing') often do not dissolve well in water, whereas those that are hydrophilic ('water-friendly') do. An example of a hydrophilic substance is sodium chloride.

Reactions in aqueous solutions are usually metathesis reactions. Metathesis reactions are another term for double-displacement; that is, when a cation displaces to form an ionic bond with the other anion.

Read/Summarize Text



1. Read the passage.
2. Underline key expressions in each sentence.
3. Re-write each word (or expression) you underlined.
4. Summarize the passage.

Solubility

Solubility is the property of a solid, liquid, or gaseous chemical substance called solute to dissolve in a solid, liquid, or gaseous solvent. The solubility of a substance fundamentally depends on the physical and chemical properties of the solute and solvent as well as on temperature, pressure and the pH of the solution. The extent of the solubility of a substance in a specific solvent is measured as the saturation concentration, where adding more solute does not increase the concentration of the solution and begins to precipitate the excess amount of solute. The solubility of a substance is an entirely different property from the rate of solution, which is how fast it dissolves.

<https://en.wikipedia.org/wiki/Solubility>

Re-write words you underlined

Using a complete sentence, summarize or rephrase the passage
