

Chemistry 30
Unit 4: Solutions
Assignment 1

Solution Terminology

Understanding and using proper terminology in a subject is always important, and there are a number of key terms used in association with solutions. Many of these you will already know and be familiar with; other terms are new but important. A few of the terms listed below won't be used extensively in this unit but are helpful to know nonetheless.

Find definitions for the following terms. Some terms also include questions to be answered. When pairs of terms are given, define both and be sure to clearly distinguish between the two terms.

mixture / compound

define both terms and list the key differences between a mixture and a compound.

give an example of each

homogeneous / heterogeneous mixtures

solutions are which type of mixture?

solution

aqueous solutions / tinctures

define both terms. What is the difference between these two types of solutions?

solute / solvent

define both terms.

Give at least one specific examples of solutions involving: gases dissolved in other gases; liquids dissolved in other liquids; solids dissolved in liquids. Identify the solute and solvent in each case

soluble / insoluble

solubility

miscible / immiscible

dilute / concentrated

unsaturated / saturated / supersaturated

how can you prepare a supersaturated solution?

electrolyte / nonelectrolyte (or electrolytic solution / nonelectrolytic solution)

What causes the one type of solution to conduct electricity, while the other one does not?

precipitate (precipitation reaction)

ionization / dissociation

alloy / amalgam