

General Chemistry I
Topic: Properties of Solutions

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The student should be able to:

1. Differentiate between saturated and unsaturated solutions given solubility data.
2. Determine the concentration of a solution in the units shown below given appropriate mass, volume, and formula data:
 - a) mass-mass %
 - b) mass-volume %
 - c) molarity
 - d) molality
 - e) mole%
3. Prepare solutions with a specified concentration in the units shown below given the appropriate mass, volume, and formula data:
 - a) mass-mass %
 - b) mass-volume %
 - c) molarity
 - d) molality
 - e) mole %
4. Solve freezing point depression and boiling point elevation problems given the appropriate data.
5. Solve dilution problems given the appropriate volume and concentration data.
6. Solve osmotic pressure problems given the appropriate data.
7. Solve Raoult's law problems given the appropriate data.