HOMEWORK 13: Solubility and Solutions
Show your work clearly to get credit.

1. A solution is composed of a solute or solvent dissolved in a solute or solvent. The solute or solvent is present in the large amount, while the solute or solvent is present in the smaller amount. (circle correct word in each underlined pair)

2. a. The mass/mass percent concentration is the mass of solute or solvent divided by the mass of solvent or total solution times 100. (circle correct word in each underlined pair)

   b. A solution is made by dissolving 15.0 g of glucose (C₆H₁₂O₆) in 100.0 g of water. Calculate the mass percent of glucose in this solution. Show your work.

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3. A solution is made by dissolving 4.35 g of solid NaOH in enough water to make 1.00 L of solution. Calculate the molarity (M) of this solution. Show your work.

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4. What volume of 10 M nitric acid (HNO₃) must be used to prepare 1.0 L of 0.50 M HNO₃ solution? Be sure to show your work.

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