



Name: _____
Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet Concentration of Solutions

A. Directions: Read and analyze each question carefully. Choose the letter of the correct answer. Write your answer in the space provided.

- _____ 1. What do you call the measure of the amount of solute that actually dissolves in a given amount of solvent or solution?
A. Dilution B. miscibility C. Saturation D. concentration
- _____ 2. A certain solution has a mass of 56 grams. If the solute is 12 grams, what is the percent by mass concentration of the solution?
A. 4.67% B. 17.65% C. 21.43% D. 27.27%
- _____ 3. The volume of the solvent in a given solution is equal to 312 milliliters. If you added 73 milliliters of solute to the solution, what is the percent by volume concentration of the solution formed?
A. 4.39% B. 18.96% C. 23.40% D. 30.54%
- _____ 4. Urea is used as a fertilizer for flowering plants. You added 6 grams of urea to 500 grams of water for you to use during watering the plants. What is the percent by mass concentration of the solution?
A. 1.19% B. 1.20% C. 1.21% D. 1.26%
- _____ 5. A student is preparing solutions for a laboratory experiment by dissolving solid solutes in liquid solvents. Which action will increase the rate of solubility?
A. stirring the solute in the solution
B. lowering the temperature of the solvent
C. increasing the pressure on the solution
D. increasing the particle size of the solute

B. Directions: Identify what is being referred to by the following descriptions. Choose your answers from the list presented in the box. Write your answers in the space provided.

Concentration	Percent by Volume	Percent by Mass
	Dilute Solution	Concentrated Solution

- _____ 1. Pertains to a type of concentration wherein the amount of solute is less compared to the total amount a solvent can dissolve
- _____ 2. A method of determining the concentration by using the mass of the solute divided by the mass of the solution multiplied by 100
- _____ 3. Pertains to how much solute is dissolved in a given amount of solvent
- _____ 4. A method of determining the concentration by using the volume of the solute divided by the volume of the solution multiplied by 100
- _____ 5. Pertains to a type of concentration wherein the amount of solute is larger compared to the amount of solvent present