

Finding Concentrations of Mixtures Practice

Name: \_\_\_\_\_

**MAKE SURE TO SHOW YOUR WORK FOR EACH PROBLEM TO GET FULL CREDIT AND MAKE SURE TO INCLUDE THE CORRECT LABEL TO EARN FULL CREDIT!**

1. What is the concentration of a solution that has 55 Kilograms of salt dissolved in 500 Liters of water?
2. (.5) grams of sodium chloride is dissolved in .05 Liters of water, what is the concentration?
3. What is the concentration of a solution that has 734 grams of lithium sulfate dissolved in 2500 milliliters of water?
4. There are two solutions, A and B. Solution A has 1 gram of sodium hydroxide dissolved in 1 liter of water. Solution B has 55 grams of sugar dissolved in 500 milliliters of water. Which of the solutions is the most concentrated?
5. What is the concentration of a solution that has 10 grams of magnesium chloride dissolved in 1 deciliter of ammonia?
6. What is the concentration of a solution that has 2.3 Kilograms of lithium chloride dissolved in 500 cm<sup>3</sup>?
7. What is the concentration of a solution that has 1.5 grams of potassium iodide dissolved in 150 milliliters?

8. There are two solutions, S and T. Solution S has 54.3 grams of potassium chloride dissolved in 500 milliliters of water. Solution T has 12.1 grams of carbon sulfate dissolved in 125 milliliters of chlorine. Which substance is the most concentrated?
9. What is the concentration of a solution that has 10 grams of sucrose dissolved in 240 liters of water?
10. A solution has a concentration of .25 g/ml. There was 144 ml of water to start with, how many grams of sugar were added to get this concentration?
11. Samuel mixes 45 milliliters of lemonade with 75 milliliters of Pepsi in a large pitcher. Which of the substances is the solute and which one is the solvent and explain how you know this to be true?
12. A solution has a concentration of .08 g/ml. There was 10 grams of sugar mixed into the liquid to make this concentration. How much liquid was used to make this solution?
13. Karisma mixed 27 liters of nitrogen with 18 liters of helium in a balloon. Which of these gases is the solute and which is the solvent and explain how you know this to be true?
14. What is the concentration of a solution that was made with 125 grams of salt and 225 liters of water?
15. A solution has a concentration of .05 Kg/L. The solution was created by mixing 500 Kilograms of potassium chloride and water. How much water was used to make this solution?