

CHEM 101  
Concentration worksheet

1. How many grams of solute are needed to prepare 500. g of 3.50%  $\text{Na}_2\text{CO}_3$ ?
2. A sample of 500. mL of 5.00% aqueous ethanol contains how many mL of pure ethanol?
3. How many mL of 2.50% glucose solution are needed to obtain 0.500 g glucose?
4. In 100. mL of 5.00%, how many grams of salt are there?
5. What is the molarity of 0.10 mole NaCl in 40. mL of solution?
6. What is the molarity of 320. g glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) in 500. mL solution?
7. How many grams of solute are in 750. mL of a 1.00 M glucose solution?

Answers:    1) 17.5 g    2) 25.0 mL    3) 20.0 mL    4) 5.00 g    5) 2.5 M  
                 6) 3.56 M    7) 135 g