BCI SCIENCE
SCH 4CI

1. A saline solution with a mass of 355 g has 36.5 g of NaCl dissolved in it. What is the mass/mass percent concentration of the solution?   **10.3 %**

2. What is the concentration in mass/volume percent of a solution if you dissolve 1.25 g of NaCl in 25.0 mL of water?   **5.0%**

3. Calculate the amount of ethanol in wine in mL in a 750 mL bottle given that the label indicates that the wine is 12% v/v.   **90 mL**

4. If 17 g of sucrose is dissolved in 183 g of water, what is the concentration of sucrose in ppm?   **9.29 x 10^7 ppm**

5. What mass of baking soda, $NaHCO_3$, is required to make a 0.25 L, 0.1 M solution?
                    2.10 g

6. What is the final concentration of a 2.75 M $HCl_{(aq)}$ solution if the original 2.0 L solution was diluted to a final volume of 3.5L?   **1.57 M**