

## Concentration Units Practice

1. What is the concentration (in M) of a solution containing 5.2 moles of sodium chloride in 500.0 mL of solution?
2. How many liters of 4 M solution can be made using 100.0 g of lithium bromide?
3. How many grams of potassium carbonate are needed to make 200 mL of 2.5 M solution?
4. What is the concentration of an aqueous solution with a volume of 450 mL that contains 200.0 grams of iron (II) chloride?
5. If 326g of  $C_6H_6$  dissolve in 820. g of acetone. What is the molality?
6. What mass of glucose must dissolve in 400. g of ethanol to make a 1.6 m solution?
7. Calculate the molality when 75.0 grams of  $MgCl_2$  is dissolved in 500.0 g of solvent.
8. According to lab procedure, you stir 25.0 g of  $MgCl_2$  into 550 mL of water. What is the percent by mass of  $MgCl_2$  in the solution?
9. How many grams of LiCl are in 275 g of a 15% aqueous solution of LiCl?
10. Calculate the percent by volume of a solution created by adding 75 mL of acetic acid to 725 mL of water.