**Solution Preparation (g/L and mol/L)**

Communicate your problem solving approach when answering the questions below i.e. show all steps of your math.

**1)** Calculate the molar concentration of a solution made by dissolving 20.0 g of sodium hydroxide to make 300 mL of solution.

**2)** Pure lithium phosphate is used to make 250 mL of 20.0 mol/L solution.

Find the mass of solute required.

**3)** What mass of copper (II) nitrate will be required to prepare 10.0 L of 0.100 mol/L solution?

**4)** What volume of 75 mmol/L solution can be prepared from 10.0 g of sodium carbonate?

**5)** Determine the volume of concentrated hydrochloric acid required to prepare 10.0 L of a 0.200 mol/L solution.

**6)** What volume of concentrated ammonia is required to prepare 2.0 L of a 1.0 mol/L solution?