Worksheet #6 Chem177 Awino

1.) What are the names of all the strong acids? (6 compounds)

2.) What type of compounds are strong bases? (what makes a base strong)

3.) Draw a diagram of the difference between a solute and a solvent.
4.) 123 mL of a 1.00 M solution of NaCl is mixed with 72.5 mL of a 2.71 M solution of AgNO₃. What is the mass of AgCl(s) formed in the precipitation reaction?

   AgNO₃(aq) + NaCl (aq) → AgCl(s) + NaNO₃ (aq)

5.) What is the concentration of 2.6g LiF in a 500mL solution?
6.) 175 mL of a 1.6 M aqueous solution of LiCl is diluted with water to a final volume of 1.0 L. What is the final concentration of the diluted solution?

7.) A student pipettes a 100 mL sample of a 1.5 M solution of potassium bromide. How many moles of potassium bromide are contained in the sample?
8.) If you dilute 175 mL of a 1.6 M solution of LiCl to 1.0 L, determine the new concentration of the solution.

9.) To 2.00 L of 0.445 M HCl, you add 3.88 L of a second HCl solution of an unknown concentration. The resulting solution is 0.974 M. Assuming the volumes are additive, calculate the molarity of the second HCl solution.