Chemistry 20

Lesson 19 – Preparing Solutions Activity

**Prelab:**

Read page 803-804 in Nelson for a description of how to prepare a solution from a solid solute or from an existing solution.

**Problem:**

A. Preparing 100.0 mL of a 0.050 mol/L solution of copper (II) sulfate from solid copper (II) sulfate pentahydrate.

B. Preparing two other solutions through dilution:

- From 20.0 mL of the first solution, prepare 100.0 mL of the second solution.

- From the first solution prepare 100.0 mL of a 0.0040 mol/L solution.

**Write up:**

**Title** - appropriate and informative

**Purpose** for each part - Why are you doing this?

**Background Information**

- procedure for using *massing balance* correctly

- procedure for using a *volumetric flask* correctly

- procedure for using a *pipet* correctly

**Materials** list for each part

**Procedures** for each part - point form and detailed

**Observations** of the prepared solutions

**Conclusion** - answer the following questions

1. What are the concentrations of each solution made? (Show any calculations you have to make.)

2. What is the relationship between the colour of a solution and its concentration?