

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?