**Chemistry 20 Preparing Solutions Lab**

**Preparing Solutions Lab**

(2) All in order

(3) Complete

(3) Neatly done

(1) **Title**: appropriate, informative

(2) **Purpose**:

1 Part A - to learn how to make a solution from a solid

1 Part B - to learn how to make a solution by dilution

(6) **Background Information**:

1 procedure for how to use a balance

1 procedure for using a volumetric flask

1 procedure for using a pipet

1 Use of balance - *put beaker on balance and reset to zero*

1 Use of volumetric flask - *use eyedropper for last bit of water*

1 Use of pipet - *clean the pipet before and after use*

(3) **Materials** - picked at random

1 Part A - clean dry beaker

1 Part B - 10.0 mL pipet

1 Part B - 100.0 mL volumetric flask

(5) **Procedure**:

2 Calculation of mass required for first solution

1 Part A - *dissolve solute in a smaller amount of water*

1 Part A - *invert the volumetric flask a number of times*

1 Part B - *transfer the concentrated solution to volumetric flask with a pipet*

(3) **Observations**:

1 Solution 1 - *solution is a deep blue colour*

1 Solution 2 - *solution is a lighter blue*

1 Solution 3 - *solution is a faint blue*

(6) **Conclusion**

2 Calculation of concentrations for part B

3 solution 1 c = 0.050 mol/L

solution 2 c = 0.010 mol/L

solution 3 v = 8.0 mL

1 Colour of solution indicates the concentration of the solution.

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