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| Copper Experiment – Grading Rubric |  |  |
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Copper Experiment Write-up

Lab Notebook

Procedure – reference the manual, be sure to include any changes.

Log - This is important!! You should have a clearly written log of what you did and what you saw. Good descriptions are important here.

Lab book format – signature, stamp, etc.

Informal Report

* Entire report will be completed on blackboard

Reaction List - This section will be done on blackboard. You will write and balance each of the reactions that we do in the experiment, show a picture of each stage, and designate a reaction type. You will also give me the theoretical yield at each step.

Results and calculation section. – Report your expected yield, actual yield, and percent yield. Show your calculations for expected yield and percent yield. Note any unusual or unexpected observations in the experiment.

Discussion - Discuss any and all reasons why you may not have had 100% yield. Could you have both lost and gained product?? Which step do you believe had the biggest effect on your % yield? Be sure to justify any hypotheses that you suggest. Comment on the your product and explain why it might look different from the original copper sample

Conclusion – Tell the actual and percent yield for your experiment.

Questions - complete the questions at the end of the lab in the manual. All work must be shown for all questions and the stoichiometry should be shown for question #1. For questions 2 and 3, tell what reagent you would add and write the reaction that would occur. Also explain how the reagent you have chosen will allow you to isolate a sample of the pure substance you wish to obtain. For example if you wanted to prepare and isolate copper sulfide from copper nitrate, you would mix it with a solution of potassium sulfide. The copper sulfide would precipitate and you could filter the solution and the precipitate would contain pure copper sulfide. The potassium nitrate would remain in solution and be discarded with the filtrate.