

This is What Mrs. Sibert wants in the Formal Report for Experiment 4

Introduction: Discuss "light" and "color" as it relates to ALL of the experiments you carried out in this lab. Describe light in relationship to the electromagnetic spectrum, monochromatic light, lasers, coherent vs. incoherent light, emission vs. absorbance of light, transmittance vs. absorbance of light, Beer's Law, additive, subtractive and complementary colors, pigments vs. light.

You may get information in addition to the limited amount on your lab sheet from the links on the RVGS Chemistry web pages, a **textbook** (wow, what a novel idea...using a textbook!!), other references Mrs. Sibert might be nice enough to let you borrow, and encyclopedias from home or the library.

Methods and Materials: Sub-divide this section according to the way it was given on the lab sheet, even though you probably did the sections in a different order. Put the part and title, then, describe what you did. Sketches, clip art, scanned images, and the like, are good here. I have a CD with LOTS of chemistry clipart (beakers, Bunsen burners, etc). You can look through the book of pictures to see if any would interest you. You may use the digital camera to take pictures of different things during the course of carrying out the lab.

Results: Again, sub-divide this section as you did in methods and materials. Write at least one paragraph for each different part you did. You should ALSO include charts/tables of data or observations to support your results.

Discussion: Tell me what you learned from this lab about color and light. In what way(s) will this new information be of benefit to you outside of chemistry class? (REMEMBER, this lab report counts as a double lab!!)

Mechanics of the report:

Of course, the standard requirements apply:

- Word processed, with 1-inch margins, no larger than size 12 font, line spacing of 1½, **pages numbered beginning with the first page of the introduction.**
- Make sure that you use spell check **AND proof read for grammar!!!!!!**
- Make a cover page that reflects the purposes of the lab
- Put a heading for main sections, and sub-sections in **bold type**
- Include a Table of Contents showing where to find main and sub-sections.
- Include a bibliography with references for all information and images that are not your own work.

It is expected that you will include color images and/or drawings to better help show or describe the things you did as part of the lab. Make them only large enough to see the details, but not so big that they take up more than one third of a page.

Evaluation of the report: Evaluation of the formal report will follow the attached rubric. The paper will be 75% and the lab book will be 25% of the overall grade.

When is this report due? The lab book is also to be turned in on this date.

AM2: 9:45 am on Monday, October 27

PM1: 12:25 pm on Monday, October 27

PM2: 1:45 pm on Monday, October 27

The report should be a maximum of 20 pages long, including references.