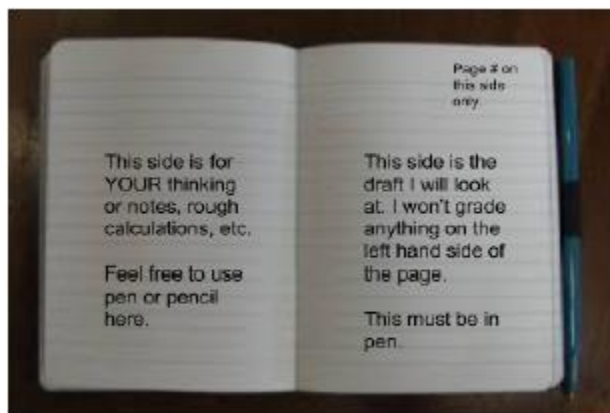


## The AP Chemistry Lab Notebook



All of your work in lab will be recorded in a bound composition notebook. Anything I grade for the labs must be in the notebook unless otherwise noted. This is standard practice in research.

All work on the right hand pages must always be done in pen! (Pencil is ok only on the left pages.) Your formal lab write-ups will be on the right-hand pages. I will never look at the left-hand pages. You may use these to jot notes or do test calculations.

Because chemistry professors at some institutions ask to see a record of the lab work done by an AP student before making a decision about granting credit, placement, or both, you should keep reports of your laboratory work that can readily be reviewed.

Number the right-hand pages only. On the first or second page, create a table of contents. Leave 2-3 pages blank before starting your first lab.

### **Table of contents** (on page one or two)

Date of first day of lab	Title of lab	Lab partner(s)	Page lab starts

### **Lab report sections**

#### ***Before the lab***

1. Title (accurate, descriptive, and chemistry sounding), date you started the lab, and your lab partner(s)
2. Beginning questions for the lab—What questions did I have? What questions did the group decide to use?
3. Variables—Identify independent variables, dependent variables, constants, and controls
4. Safety—What safety information do I need for this experiment? Use MSDS sheets to identify specific safety concerns for the chemicals. What other concerns should I have?
5. Procedures—How will I perform this experiment?

#### ***During the lab***

6. Data, observations, calculations, and graphs—What observations (qualitative and quantitative) did I make? What calculations did I do to make sense of my data? What balanced equations have I written? Have I prepared a graph?

### ***After the lab***

7. Claims—What can I claim to answer my beginning questions?
8. Evidence and reasoning—What is my interpretation of the data, graphs, trends, etc? Why did we see the observations that we did in the lab? What did those observations mean? How is my accuracy and precision? Have I connected the proper evidence with the proper claim?
9. Errors and improvements—What are sources of error or limitations in the lab? How might I improve the lab design to account for the errors or limitations?
10. Reflection—How does this work tie into concepts from class? Propose a question for the next stage of experimentation. Describe a real-life application or connection of this work.
11. Presentation—Is my work neatly and carefully completed?