Lab Notebooks

"If you have built a perfect demonstration do not remove all traces of the scaffolding by which you have raised it." - Clark Maxwell

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- Why Keep a Lab Notebook:
  - To give yourself a central, physical place to record your data, to note outcomes, and paste graphs that show results. Keeping these items in one place keeps you productive.
  - Encourages sound thinking
  - Let's you to talk to yourself ask questions, record thoughts, and speculate on results.
  - Provide information to someone interested in continuing your work. If youre doing important work and die an early, gruesome death, your colleagues might want to pick it up!
- What to use:
  - A stitched binding, quadrille-ruled
  - No spiral-bound notebooks. It's too tempting to rip out pages in moments of frustration or when you make silly mistakes.
  - Use a ball-point pen, never a pencil.
  - Ring binders and stacks of loose paper are unacceptable.
- What to include:
  - All calculations annotated such that numbers are fully explained and are interpret-able by others. Remember units.
  - Detail all mistakes and problems so that you can fully explain odd results.
  - Do not delete, scratch out, or erase errors.
- General guidelines:
  - Number the pages
  - Never remove a page.
  - Clearly title the beginning of each lab experiment.
  - Attach printouts and plots as needed.
  - If you make a mistake, draw a thin line through the word or number rather than obliterating the entry with a blob of ink. You might decide later that your original entry was actually the correct one, and you'll be glad you can still read it.

- Write legibly. Your notebook doesn't have to be a work of art but it should be easily readable by another person of average intelligence.
- Provide the date of your work.
- If it has a scrapbook feel, thats what you want.
- Notes are written while in the lab setting, not afterwards.
- Should read like a diary, not a newspaper article.
- A good test of your lab notebook: could someone else, with an equivalent technical background to your own, use your notebook to repeat your work, and obtain the same results?
- Could you come back six months later, read your notes, and make sense of them?

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