

ENGR 40M Reflection examples

The reflection section is intended to help you evaluate your own learning, and to help the teaching staff get feedback both to help you and to improve the class in the future. We expect 2-4 sentences for each question that shows you've thought about the question and reflected on what you learned. Examples of good and bad responses to this are below.

What did you learn from this project, and how confident do you feel about it?

Full credit:

- "I learned how to measure voltage and current with my multimeter. I know how to make these measurements, but I'm sometimes not sure which scale setting to use or why it matters. I also learned to solder, but I'm still very bad at it.
- "I felt like I could complete all of the steps in the lab handout, but I don't understand what I was actually doing or why. I learned to solder for the first time, and feel good about that."
- "I had used a multimeter many times before, so that part was mostly review. I was a little surprised to learn how non-ideal the meter is in current measurement mode. I learned something about how solar cells are arranged to make higher-voltage panels. I didn't know they were diodes, so that was interesting. I already knew how to solder."

Fair:

- "First I experimented with my meter and learned about its non-ideal characteristics. Then I tested my solar panel, and learned about the voltage and current it produces. Finally, I learned how to measure power with my multimeter, and how to calculate energy efficiency. I feel pretty good about what I learned." *This response is basically just a repeat of everything in the lab. Explain what was specifically new and interesting to you, rather than trying to summarize everything you did in the lab. You may not mention everything you learned, and that's ok.*

Not so good:

- "I learned how to measure circuits and understand their function through real-world applications." *This is extremely generic. What specifically did you measure, and what do you understand about the circuit's function? Does your learning extend to applications other than the lab project?*
- "I learned how to build a solar-powered cell phone charger." *So... you can read the title of the lab handout?*

What was the most valuable thing you learned?

Full credit:

- "The most valuable thing I learned was computing the inefficiency by comparing the power into a device versus its output. While an advertised number sounds great, actually knowing how to measure it yourself becomes important when what's advertised does not match the real value."
- "Learning about how a DMM works was extremely helpful. It helped to reinforce Ohm's law in my head."

Not so good:

- "Voltage and current" *What about voltage and current? Why was it valuable?*

What skills and concepts are you least sure about?

Full credit:

- "I am least sure about my general understanding of the circuit voltage and current by just looking at it without doing any math. I look forward to developing a more automatic understanding when I look at different circuits."
- "I'm still confused about what an open and short circuit are."

Not so good:

- “Multi-meter realness.” *This two-word answer doesn’t tell us much about what was actually confusing, or what we might do to help you.*

What is something you wish you’d known before you started working on this lab?**Full credit:**

- “I wish I’d known how to desolder things. We made a couple mistakes and needed a TA to help us fix them.”
- “I wasn’t comfortable calculating with voltage, current, and resistance when I started this lab, and that meant it was pretty confusing.”
- “Not to solder everything together before characterizing the converter board. This was in the lab handout, but we were too eager and skipped over it.”

Not so good:

- “Nothing.” *The only wrong answer here is to not put any thought into the question.*