Peer critiques for our letters to our high school teachers about whether light bulbs are Ohmic.

First, look through the file of letters and find your letter; you will be critiquing the letter that is after yours (and if yours is the last letter, you should critique the first one). Read over the letter to be reviewed to get general impressions. Indicate which letter you are critiquing here by number: \_\_\_\_

1. On first reading, what does the letter do well?
2. On first reading, is there anything that strikes immediately you as needing improvement?

Number the pages of the letter that you are critiquing. Identify page numbers where the following elements are found (please put your comments in red) and provide commentary as appropriate.

1. Personal note that connects to the reader and introduces why the writer is writing.
2. The *a priori* goals and personal goals of the investigation.
3. Description of the overall plan to accomplish the goals.
4. Description of the set-up with neatly drawn diagram of circuitry and components along with some helpful and useful commentary for the reader.
5. Presents data for something that does appear to be Ohmic using a graph and the techniques previously discussed as a benchmark for comparison to lightbulbs.
6. Presents data (graphical) that addresses whether light bulbs are Ohmic and incorporates the uncertainty analysis that we have learned in a way that could be reproduced by the reader.
7. Presents some commentary based on your data that addresses “Are light bulbs Ohmic?” addressing evidence for or against. For each data set there are two things to consider regarding Ohm’s Law: (i) is the slope constant? (ii) Is the y-intercept zero? Are both things considered and remarked upon for all three data sets?
8. Attempts to characterize the extent to which your light ‘bulbs’ are or are not Ohmic by commenting on the value you might get for the resistance of a light bulb if you only took one data point and whether this number (with units) tells the complete story.
9. Identifies and comments about any aspects of mathematics, or of physics, or of experimental science in general, that is understood better now because of this project.
10. Addresses these questions: “Looking back, what surprised you most about the project? Were your goals accomplished? Looking forward what might you pursue next?”
11. Indicates and discusses in closing at least one aspect of the project that connects in some way to the reader to whom the letter is addressed, based on your mutual history.

Note any grammar problems or other issues on the pages of the document.

Now consider your own letter that you wrote to your high school teacher. Which of the items above (pick at least 3) do you think need the most work now that you have been through this detailed critique of your colleague’s letter? Write a sentence or two about the changes you will make in the second draft of this letter.