Things that you should extrapolate from that lab report worksheet we got on September 28, 2011:

THE FOLLOWING DESCRIBES THE METHODS YOU SHOULD TAKE INTO ACCOUNT WHEN **WRITING** THE LAB REPORT. The data does not necessarily cover how to make measurements.

- Data Collection and Processing involves **Recording Raw Data, Processing Raw Data, Presenting Processed Data**. (Raw data is data that is collected, Processed data has been tampered with by means of calculations.)

- **NEVER DISPLAY RAW DATA AND PROCESSED DATA IN THE SAME TABLE**

- Conclusion and Evaluation: Concluding, **Evaluating Procedure** (finding faults), SUGGESTIONS FOR FURTHER INQUIRY

- Aspects that need to be included in all data tables:

- Units for each measured column

- Uncertainty for each column. (Uncertainty is always last digit, so if instrument records 4.001, uncertainty must be written as (±0.001 Arbitrary Units)

- **NUMBER THE TABLE (1.0 etc)**

- Correctly written title; THAT IS NOT A QUESTION

- You need to have consistent significant figures only if you have decimal places to a certain extent for the majority of the table.

For Calculations :

- Show work **once**

-Show formula **once**

**- Calculations must be in clearly labeled tables**

Conclusions and Evaluations:

- Discuss how **experimental results demonstrate a chemical principle and/or reveals relationship between IV and DV**.

- Clearly relate to the purpose of lab

-Identify and **describe relevant patterns**

- Interpret data in light of your hypothesis (“The data supports/confirms my hopthesis, or not).

- **NEVER SAY YOUR DATA “PROVES” ANYTHING**

- Compare with actual published results (If you find differences call them “**experimental discrepancy**”)

- Identify flaws in the procedure

- Discuss agreement or disagreement between experimental data and what was expected. (this should include uncertainty).

- When describing error be **specific** (don’t just write human error).

-Suggest **actual** and **specific** improvements. (stuff you can do differently in the classroom)

DO NOT USE THE FOLLOWING WORDS:

Change (state the specific change)

It, They, Them (use specific nouns)

Prove

General:

First person **past tense**

**Data processing before conclusion and evaluation**