Grading Rubric

Investigation 28: "How Much Gas Is Produced?"

Make sure all contribution sheets are attached to the back of the Lab Report

General (points can be deducted if these items are not followed)

- One hard copy of the report per group. No folders, just staple it.
- Title page with section, team, and team members' names.
- Label each of the sections listed below.
- Typewritten in past tense, passive voice, no use of first person, and no contractions or slang. Uniform in spacing (double space) and fonts,
- Proper grammar and spelling.
- Attach the contribution sheets to the end of the report.

Introduction (l.5pt)

- Briefly describe the goal in this investigation.
- Describe the Idea Gas Law and explain each character in the equation PV=nRT.

Materials & Procedure (2pts)

- Provide a list of reagents/equipment made available in the lab that you used.
    - Include a diagram of the equipment used.
    - Molarities of solutions must be listed correctly.
    - Proper subscripts and physical states are very important.
- Provide a clear description (in a paragraph style) of the procedures used during the course of the experiment; including the used volumes of the solutions. *This should be detailed enough that another group could duplicate your work.*

**Remember that you have three different reactions to work on.

Results (3pts)

- Include the balanced equations with proper physical states for reactions done in the lab.
- Show one sample calculation for each of the following:
    - Theoretical amount of reactants according to the provided or measured parameters.
    - Theoretical amount of produced gas for each reaction.
    - Experimental amount or produced gas for each reaction.
    - Percent yield of one trial for each reaction (experimental P_{H2} /theoretical P_{H2} × 100% or experimental P_{CO2} /theoretical P_{CO2} × 100%).
    - Percent error of one trial for each reaction (|experimental-theoretical|/theoretical x100)
- Create a table with the following data:
    - The amount of reactants used in each trial for each reaction.
    - The gas pressure measured before and after each trial.