Laboratory Report Guideline

Rate Law

1. **Cover Page**

2. **Data**
   - table of reactant volumes and the time required for the color to change
   - table of final concentrations, the rate of each run, and the corresponding rate constants
   - table of concentration logarithms
   - graphs of log [ ] vs log (rate) – one for each reactant – $\Gamma^-$, $H^+$, $BrO_3^-$

3. **Calculation**
   - show one set of calculations for one of the reactants

4. **Results and Discussion**
   - determine the average and standard deviation for run #1.
   - determine the average and standard deviation of the rate constant values
   - use these values to discuss of the reproducibility of the data

5. **Conclusion**
   - give an overall summary of the experiment
   - answer questions on page 48 (be specific with your answers, especially for question 4)

6. **References**

**Reminder:** be sure not to use pronouns and make sure all your data tables and calculations have the appropriate units and significant figures