Chemistry 2C: Assignment 1

Average: 21.6/23 (93.9%)

Common mistakes/issues:

4. **Part b**:
   - Not calculating the numerical value of the rate (leaving it in natural log format)
     - Points were not taken off for this
   - Not explicitly noting verification of the rate relationship: $r = ln(2)/n$
     - Points were not taken off IF this relationship was included in their work

5. **Part a**:
   - Not attaching all 3 plots, only attaching zero/first order, OR only attaching first order
     - Received credit as long as plots of data were referred to in their response
   - Not explicitly stating that the reaction order is identified by the plot that is linear
     - 0.5 points removed
   - Not explicitly stating that the reaction is first order
     - 0.5 points removed

   Part b:
   - Including equation of linear fit BUT not specifying slope, intercept
     - Including equation, but failing to specify slope/intercept: 0.5 points removed
     - Writing nothing (no equation or slope/intercept): full points removed

   Part c:
   - Giving the rate constant, k, instead of the rate of reaction
     - Giving k or a correct value with no units: 0.5 points removed
     - Writing nothing: full points removed
   - Failing to verify the intercept/$[H_2O_2]_0$ relationship
     - Most all who did this part got it correct, those who wrote nothing lost full points