

Kinetics of Crystal Violet Fading Peer Grading Rubric

Whose lab report are you grading? _____

Grader's Name _____ Date _____ Period _____

***Take off at least one point for each box that is not checked in the table below.

<u>Requirements</u>	<u>Earned Points</u>	<u>Possible Points</u>	<u>Comments</u>
Heading <ul style="list-style-type: none"> <input type="checkbox"/> Date of experiment <input type="checkbox"/> Lab partner(s) <input type="checkbox"/> Experiment Title 		3	
Pre-Lab <ul style="list-style-type: none"> <input type="checkbox"/> Purpose Background Knowledge (4 pts) <ul style="list-style-type: none"> <input type="checkbox"/> 1. Includes 2 ICE tables <input type="checkbox"/> 2. Reaction #2; 1 CV⁺: 1000 OH⁻ <input type="checkbox"/> 3. Graph 1: 1st order, Graph 2: 0th order, Graph 3: 2nd order <input type="checkbox"/> 4. Rate constant = (-) slope of the trend line Materials <ul style="list-style-type: none"> <input type="checkbox"/> Bulleted list <input type="checkbox"/> Accurate, Comprehensive Procedure <p>Safety</p> <ul style="list-style-type: none"> <input type="checkbox"/> Comprehensive <p>Protocol</p> <ul style="list-style-type: none"> <input type="checkbox"/> Imperative <input type="checkbox"/> detailed enough to follow <input type="checkbox"/> numbered steps 		11	
Data <ul style="list-style-type: none"> <input type="checkbox"/> Completed Data Table (-1 point if no title) 		5	
Data Processing <ul style="list-style-type: none"> <input type="checkbox"/> [CV⁺] vs. time <input type="checkbox"/> ln [CV⁺] vs. time <input type="checkbox"/> 1/[CV⁺] vs. time <input type="checkbox"/> Graphs include appropriate titles (3 points) <input type="checkbox"/> Graphs include labeled axes WITH UNITS (3 points) <input type="checkbox"/> Graphs include trend lines (3 points) <input type="checkbox"/> Equation of trend line and R² value (1/2 pt each = 3 points) 		15	

Discussion Questions <ul style="list-style-type: none"> ❑ The reaction is 1st order with respect to [CV⁺] ❑ The reaction is ____ order with for [OH⁻] (must show work) ❑ Rate = k [CV⁺]ⁿ[OH⁻]^m 		3	
Conclusion and Evaluation <ul style="list-style-type: none"> ❑ Complete sentences ❑ Correct spelling and grammar Paragraph 1: <ul style="list-style-type: none"> ❑ What is the purpose? ❑ Hint: Phenolphthalein is colorless in acidic solutions and pink in alkaline solutions ❑ At least 2 variables included ❑ At least 2 constants included Paragraph 2: <ul style="list-style-type: none"> ❑ Likely errors ❑ How do errors affect results? Be specific! ❑ How can results be improved? (Reasonable suggestions) ❑ Suggestions for further experiments 		10	
Presentation <ul style="list-style-type: none"> ❑ Well-organized, sections clearly labeled ❑ Neat, legible writing ❑ Table of contents includes information ❑ Page numbers included ❑ Lab is written in ink ❑ Errors properly crossed out, no white out ❑ Writes on one side of the page only 		3	

Total points earned: _____ / 50

***Please record the score in the table of contents

Write two things the student did well in this lab report:

-
-

Write two things the student could improve on for the next lab report:

-
-