

Title

by "1st Author (You)" and "2nd Author (Lab Partner)"

Submitted on "DATE"

Research Question:

Data:

mL HCl	mL of Na ₂ S ₂ O ₃	mL H ₂ O	Temperature °C	Time of rxn (s)
5	5	0	Room (control)	
4	5	1	Room	
3	5	2	Room	
2	5	3	Room	
5	4	1	Room	
5	3	2	Room	
5	2	3	Room	
5	5	0	40	
5	5	0	60	
5	5	0	10	

Results Summary/Conclusion:

Required Questions:

1. What generalizations are you able to make concerning the effect of each factor you varied on the rate of the reaction based on YOUR results?
2. How is the rate of a reaction related to the time of the reaction?
3. It is found that a 10 °C increase in temperature roughly doubles the rate of many chemical reactions. If a reaction takes 20 seconds at 40 °C, how long would it take at 60 °C?

4. Explain, using collision theory, how each factor (change in concentration, temperature change) tested should alter the reaction rate?

Rubric:

Title, Name(s), Date	/ 3
Data (Tables = 4 points, Calculations = 4 points, Graph = 2 points) or (Tables = 5 points, Calculations = 5 points)	/ 10
Results Summary/Conclusion including error analysis	/ 6
Required Questions	/ 6
Total	/ 25

