Sulfur clock essay

Question Set: 1. What kind of graph results when you plot ml of thiosulfate against time in seconds? 2. What does this tell you about the rate of the reaction? 3. What do you think would have happened to the reaction time if you had reduced the hydrochloric acid by half? Explain why. 4. What should you have learned about reaction rates? 1. The kind of graph that resulted when I plotted the mL of thiosulfate against the time in seconds was an exponential decay. 2.

The graph tells us that the rate of reaction increases when there is more thiosulfate as the reaction took more time when there was less thiosulfate. This is shown on the graph by the increasing volume of thiosulfate corresponded to a smaller amount of seconds. 3. If we reduced the hydrochloric acid by half, the seconds that the reaction would take to occur would increase. This happens because if there were less hydrochloric acid then the thiosulfate would have less reactant to react with. . In this lab we should have learned how different amounts of reactants could affect a reaction. In the lab we used thiosulfate and as we increased the amount of it, the less seconds it took for the reaction occur. From this we learned that the flask with the most thiosulfate would have the fastest reaction. With that we also learned that the water was an inhibitor (substance that decreases activity) to the mixture and the more water there was the slower the reaction occured.

With the knowledge gained from this lab we can apply it to real life situations or other experiments. For example if you wanted to achieve a certain result in a constrained amount of time you could increase the amount of reactant so that the reaction would take less time to occur. There are many things

that could have been learned from this lab the most useful is definitely how concentration of reactants can affect an experiment.