Lab Conclusion

Conclusion:

This lab was run to determine whether pH would affect the rate of an enzyme catalyzed reaction. The reaction in question was the breakdown of hydrogen peroxide catalyzed by the enzyme peroxidase into oxygen and water. Peroxidase is an enzyme normally found in cells. Since the pH of human cells is around 7, It hypothesized that both raising and lowering the pH of the solution would slow the reaction rate. By examining the data, this hypothesis was found to be correct. The rate of reaction, as measured by the rate of oxygen production, was fastest at a pH of 7. The slope of the lines for the pH of 6 and 8 was much less steep, signifying a much slower rate of reaction. These results determine that pH does affect the enzyme catalyzed breakdown of hydrogen peroxide. It is inferred that the pH is not that which is seen in normal cells, 7, then then reaction is very slow. In collecting the data for the lab the experiment itself went really well. The only difficult problem that arose in this lab was getting the logger pro to work and collect the data correctly but was early fixed to insure that we had the right data.