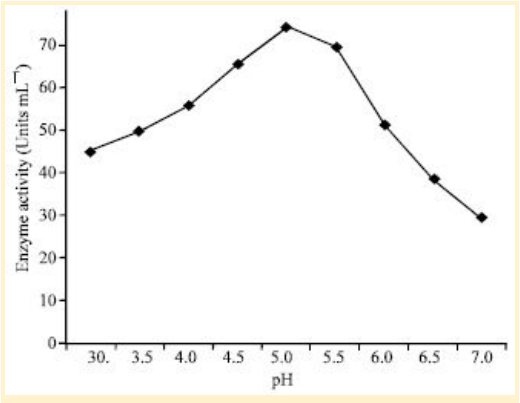
What the lab was about- a purpose statement. Includes explanation of the science that was supposed to be learned
What can be concluded from your results
Description of how the results do/do not support the scientific theory behind the activity and purpose of the lab
Your results Includes data chart(graph).
Sources of error and how that may have affected the results Explains how results would have changed if error was accounted for

The purpose of this activity was to test the effect of pH on the rate of hydrolysis of a specific enzyme. Enzymes have specific, optimal conditions(pH, temperature) in which their activity will be the highest. Enzymes have a specific shape that corresponds to the substrate(lock and key hypothesis). If the shape is altered, the rate of reaction will be diminished. Temperature and pH are two factors that can cause a change in shape of the protein(denature). Our results show that the optimal activity of amylase was found at a pH of 5. These results are consistent with finding of others using the same form of amylase(Mohapatra, et al. 1998). Other forms of amylase show a optimal pH in the range of 6-8. Higher and lower pH was found to lower the activity rate of the enzyme. This is consistent with the idea that all enzymes have a specific pH that their shape will cause the greatest activity.

Enzyme Activity versus pH



Sources of error include the enzyme mixture was prepared and tests were run at different times. The time between preparation and use may have affected the activity of the enzyme. Later trials may have had a lower rate because of a longer time sitting before use. The concentration of the substrate for the last four trials also may have been higher as they were performed on the second day and evaporation may have occurred. This would have increased the rate of reaction for the enzyme.