**Enzyme Kinetics Report Form**

**Part A**
1. Explain any differences you may have observed between the reactions.

2. Why do different starches react differently with the I₂/I⁻ solution?

3. Draw the structure of the starch-I₅⁻ complex ion.

**Part B**
1. Attach a graph of elapsed time in seconds (y axis) for starch depolymerization vs. enzyme concentration (% wt) (x axis).

2. Use the enzyme kinetics mechanism proposed in the introduction to explain the trend in the data as seen on your graph.

3. a) Why would it be difficult to follow the reaction at enzyme concentrations higher than the ones suggested in your data table?

   b) Suggest a way it could be done.
**Part C**

1. Attach a graph of elapsed time in seconds (y axis) vs. starch concentration (% wt) (x axis).

2. Explain the trend in the data as seen on your graph.

3. Compare the starch concentration to enzyme concentration ratio to the corresponding ratios used in Part B.
**Part D**
1. Attach a graph of elapsed time in seconds (y axis) vs. pH (x axis).

2. Explain your data in terms of how a pH change might affect the structure of the enzyme.

**Part E**
1. Attach a graph of elapsed time in seconds (y axis) vs. temperature (°C) (x axis).

2. Explain your results on the basis of how the temperature affects the protein structures that were shown earlier.
Part F
1. What dilution factor did you use for your saliva?

2. What average elapsed time did you find?

3. What do you think would have been the effect of chewing or consuming something other than a rubber band before collecting your saliva sample (E.g., chewing gum, coffee or toothpaste)?