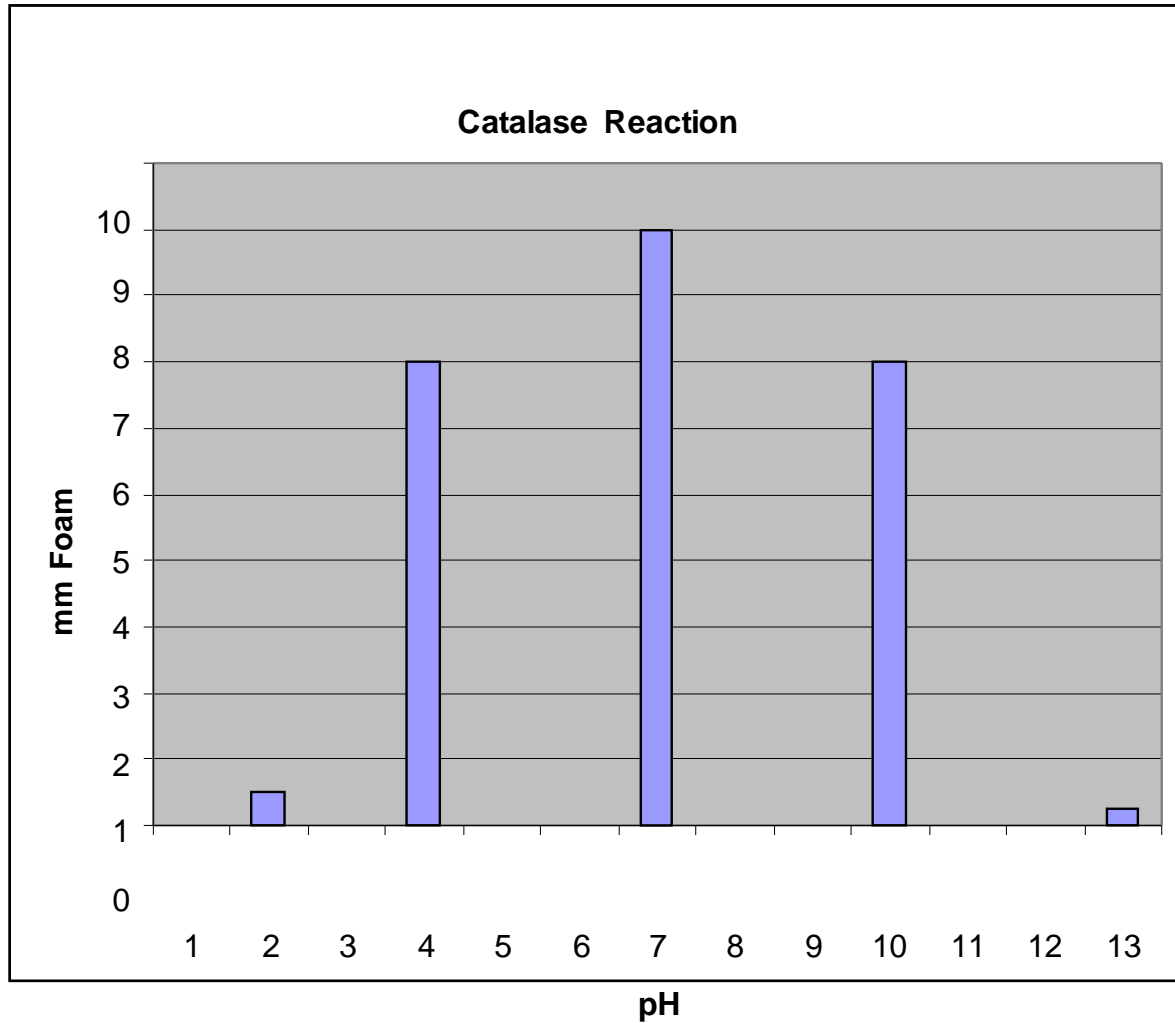


Enzyme Lab Review

In Class Catalase Reaction Lab

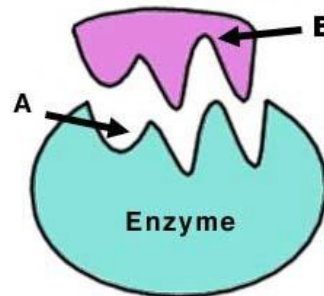


- Based on the data on this graph, what is the pH optimum for the enzyme?
- How do you know?
- What are the products of the reaction?
- What are you measuring?
- Why was there so little reaction at pH 2 and 13?
- In the lab, why did we measure the foam?

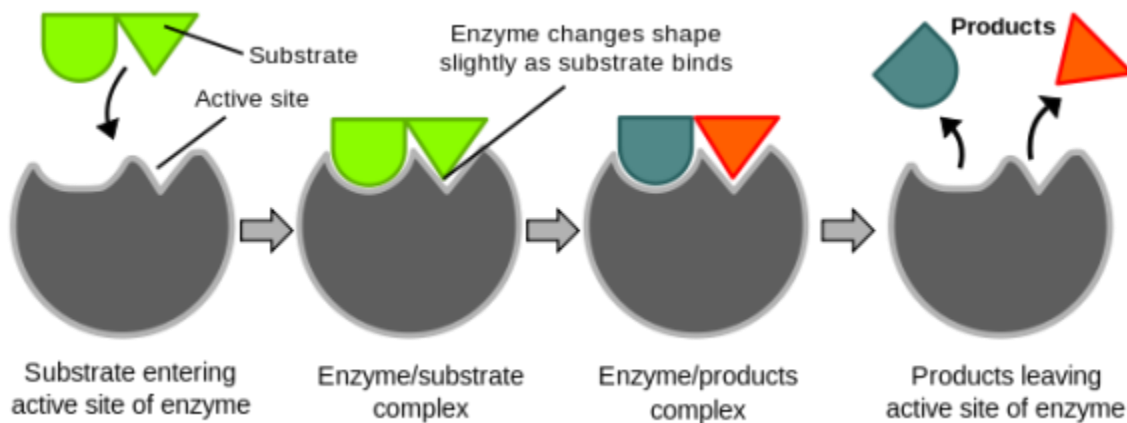
Enzyme Lab Review

Parts of the Enzyme: Structure and Function

- What is A? What is B?
- When an enzyme is denatured, what happens to A?
- Name the substrate, enzyme, and products reaction we tested in lab. (The enzyme is called liver extract.)
- An enzyme is a type of (blank).
- Catalase is a specific type of (blank).
- Proteins are polymers, made of monomers called (blank).
- Enzymes are polymers, made of monomers called (blank).



in the
NOT



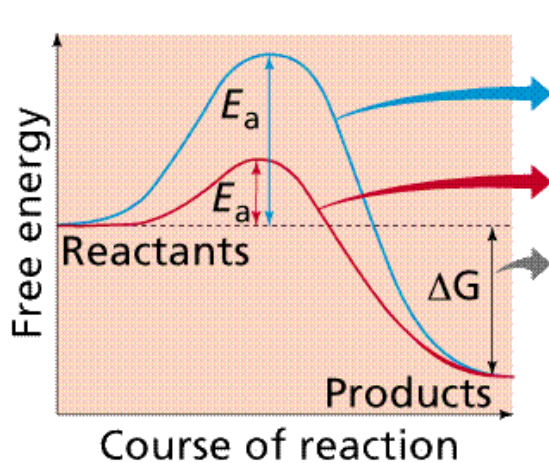
Enzyme Lab Review

Enzyme Lab Exercise Review Questions

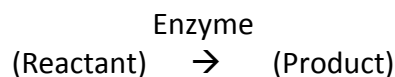
- If you put hydrogen peroxide in a test tube with the enzyme, Lactase, would foam be produced?
- Why or why not?
- What is the function of an enzyme?
- Why doesn't an enzyme work well at very low temperatures?
- If you bring frozen Catalase enzyme back to body temperature, does it still work? Why or why not?
- What happens to an enzyme when brought to a very high temperature?
- If the enzyme is brought back to body temperature, does it still work? Why or why not?

Enzyme Reactions

- What do enzymes do in any chemical reaction?
- What does this graph represent?
- What do you think the top and bottom lines represent? Hint: Enzymes.



- What is catalase?
- What does it do in the cell?
- Why do we have catalase in our livers?
- Write down the chemical reaction for hydrogen peroxide with the enzyme catalase.
- What is the reactant? The enzyme? The Product?



Enzyme Lab Review

- What is the effect on an enzyme if it is exposed to a very high or very low pH compared to its optimal pH?
- Is the optimal pH the same for all enzymes?

- What is denaturation?
- What are the different ways to denature an enzyme?