

Enzyme Controlled Reactions Virtual Lab

http://www.mhhe.com/biosci/genbio/virtual_labs/BL_11/BL_11.html

Question
How do substrate concentration and pH affect enzyme-controlled reactions?

Purpose
In this investigation you will determine the effects of substrate concentration and pH on the initial rate of an enzyme-catalyzed reaction.

Objectives:

- Determine the effect of substrate concentration on the initial rate of an enzyme-catalyzed reaction.
- Determine the effect of pH on the initial rate of an enzyme-catalyzed reaction.

Procedure
Click the TV/VCR. Then click the Play button on the video controller. Watch an animation about enzyme action.
Click More Information to read about enzymes and substrates.

Information Reset

Journal Calculator Table Audio Print

Read and follow the instructions for the enzyme experiment.

After you complete the experiment, click on **Journal** icon and answer the 5 analysis questions then email them to me at KBKing@lenoircityschools.net by clicking on the submit button.

Journal

Describe the relationship between substrate concentration and the initial reaction rate of an enzyme-catalyzed reaction. Is this a linear relationship? What happens to the initial reaction rate as substrate concentration increases?

Question 1 of 5

Not Answered

Print Submit

Next, try your skill with the virtual lab bench titration:

http://www.phschool.com/science/biology_place/labbench/lab2/intro.html

Lab write up

<http://www.ncsu.edu/labwrite/>