Lab# 5.
http://www.mhhe.com/biosci/genbio/virtual_labs_2K8/pages/EnzymeControlledReactions.html
Complete the following and email it to the instructor by 5pm Wed. Sept. 30, 2009. Be sure the label the attachment with your first name, last name and lab number.

Virtual Lab: Enzyme Controlled Reactions
Worksheet

1. Which of the following does NOT apply to an enzyme:
   a. Catalyst
   b. Inorganic
   c. Protein
   d. All of the above apply to an enzyme

2. When an enzyme catalyzes a reaction:
   a. Substrate(s) bind in the active site
   b. Products bind in the active site
   c. The shape of the enzyme remains unchanged
   d. The enzyme is consumed by the reaction

3. Which of the following would interfere most with the ability of an enzyme to catalyze a reaction?
   a. Reduced concentration of substrate available
   b. Reduced concentration of product available
   c. Increased concentration of substrate available
   d. A change in the pH

4. Feedback mechanisms regulate the rate of enzyme activity, effectively "turning off" an enzyme in a reversible way until more product is needed. Which of the following would be most effective as a feedback mechanism?
   a. Reduced concentration of product
   b. Increased concentration of substrate
   c. A change in pH
   d. Temporary binding of a non-substrate molecule in the active site

5. Which of the following statements is accurate in describing the activity of the lactase enzyme?
   a. Lactase can function equally effectively at many different pH levels
   b. The shape of lactase does not change during the reaction
   c. Lactase is converted to glucose and galactose by the reaction
   d. One lactase enzyme can catalyze many reactions