Honors Biology Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
NDHS Per: \_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

**Enzyme Review Questions**

**Directions:** Using your notes and pages 50 – 53 in your text complete the following questions.

1. What are the two parts of a chemical reaction?
2. What is the Activation Energy of a chemical reaction?
3. What is the difference between an EXOTHERMIC reaction and an ENDOTHERMIC reaction? (You will have to look those terms up and relate them to Figure 2-20 on page 51)
4. What is a catalyst? How does it help a chemical reaction move forward?
5. What are enzymes and why are they so important?
6. How do enzymes help regulate the elimination of carbon dioxide from your body?
7. What is a substrate? What is the name of the place where it binds to an enzyme?
8. Substrates fit into an enzyme by what is called an “Induced fit”, not a lock and a key. Explain the difference between the two ideas.
9. What are the factors that affect enzyme activity?
10. How can high temperatures and extreme pH levels affect the ability of an enzyme to do its job?
11. How do the levels of enzyme and substrate affect the rate of the chemical reaction?
12. What is negative feedback inhibition?