

The reaction above is an example of:

1. Dehydration Synthesis (or) Hydrolysis (circle one)
2. Endothermic (or) Exothermic (circle one)

For the reaction shown above:
3. Draw a circle around the substrate.
4. Draw a rectangle around the product.
5. Draw a triangle around the enzyme.

For the reaction shown above, provide the specific NAME of the substrate,
 enzyme, and product. (Good Review for the unit exam)
6. Substrate: $\qquad$

$$
+
$$

7. Enzyme: $\qquad$
$\qquad$
8. Product: $\qquad$
9. In the space below, describe specifically what is happening in the reaction shown above.
10. In the space below, identify ONE general factor which could limit the effectiveness of the enzyme in the reaction shown on the previous page.
$+$ $\qquad$ EXPLAIN WHY this factor would inhibit the function of the enzyme.
11. What is denaturation? Specifically describe what effect denaturation has on enzyme structure.
$+$
12. In the chemical reaction on the first page, would you categorize the enzyme as a substrate, product, or neither ? EXPLAIN WHY.
$+$
13. What is an exergonic (exothermic) reaction?? Explain the effect an enzyme may have on this reaction? You must DISCUSS ENERGY in your answer and you must also SKETCH A GRAPH to support your answer.
