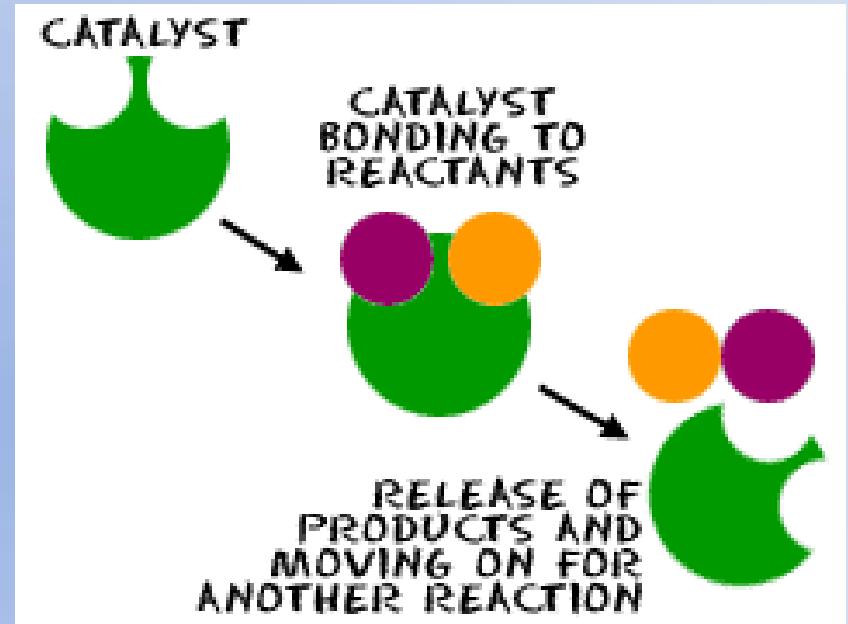


# Enzymes

Identify and Investigate the role of enzymes.

# 1. What is a catalyst?

- A compound that speeds up the rate of reaction but is not used up in the reaction.



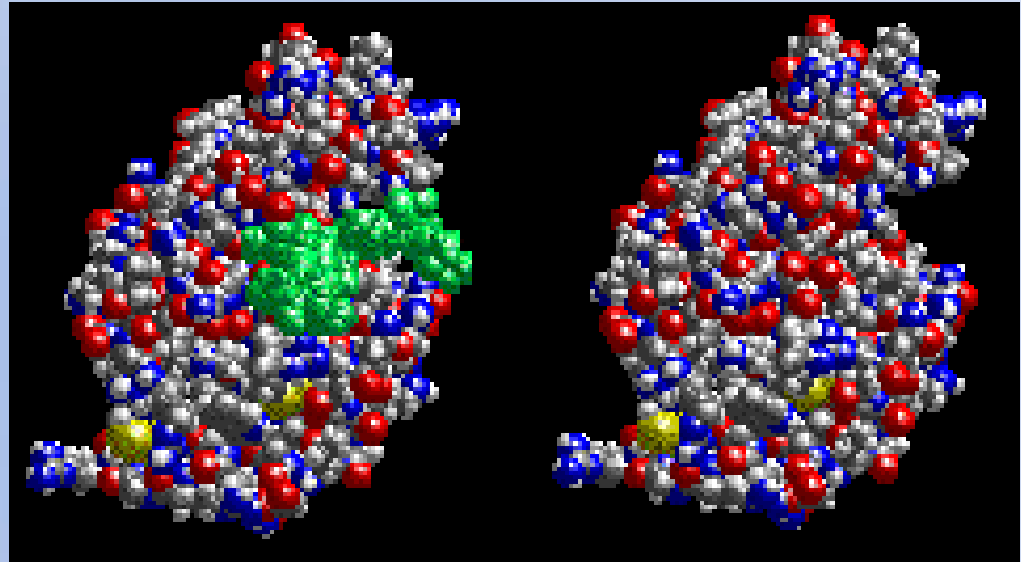
## 2. What is a biological catalyst?



- A catalyst that is used within the body of organisms to help with life functions.

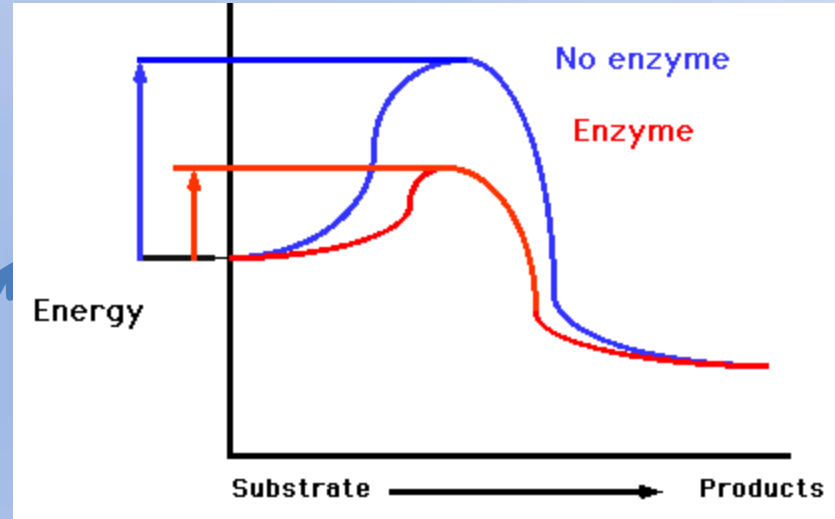
### 3. What type of organic molecule is an enzyme?

- A protein!

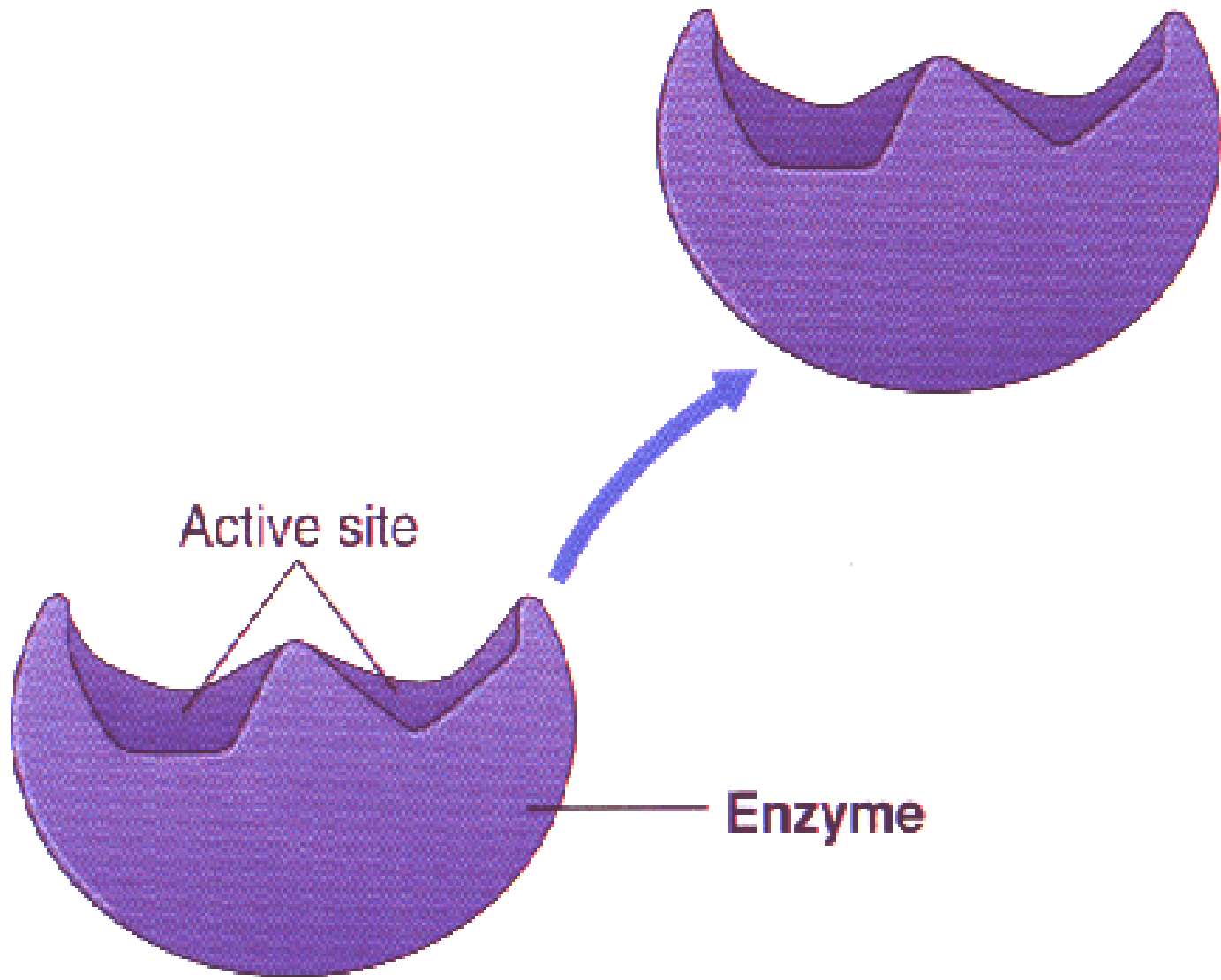


# 4. What is activation energy?

- The amount of energy required for a reaction to occur.

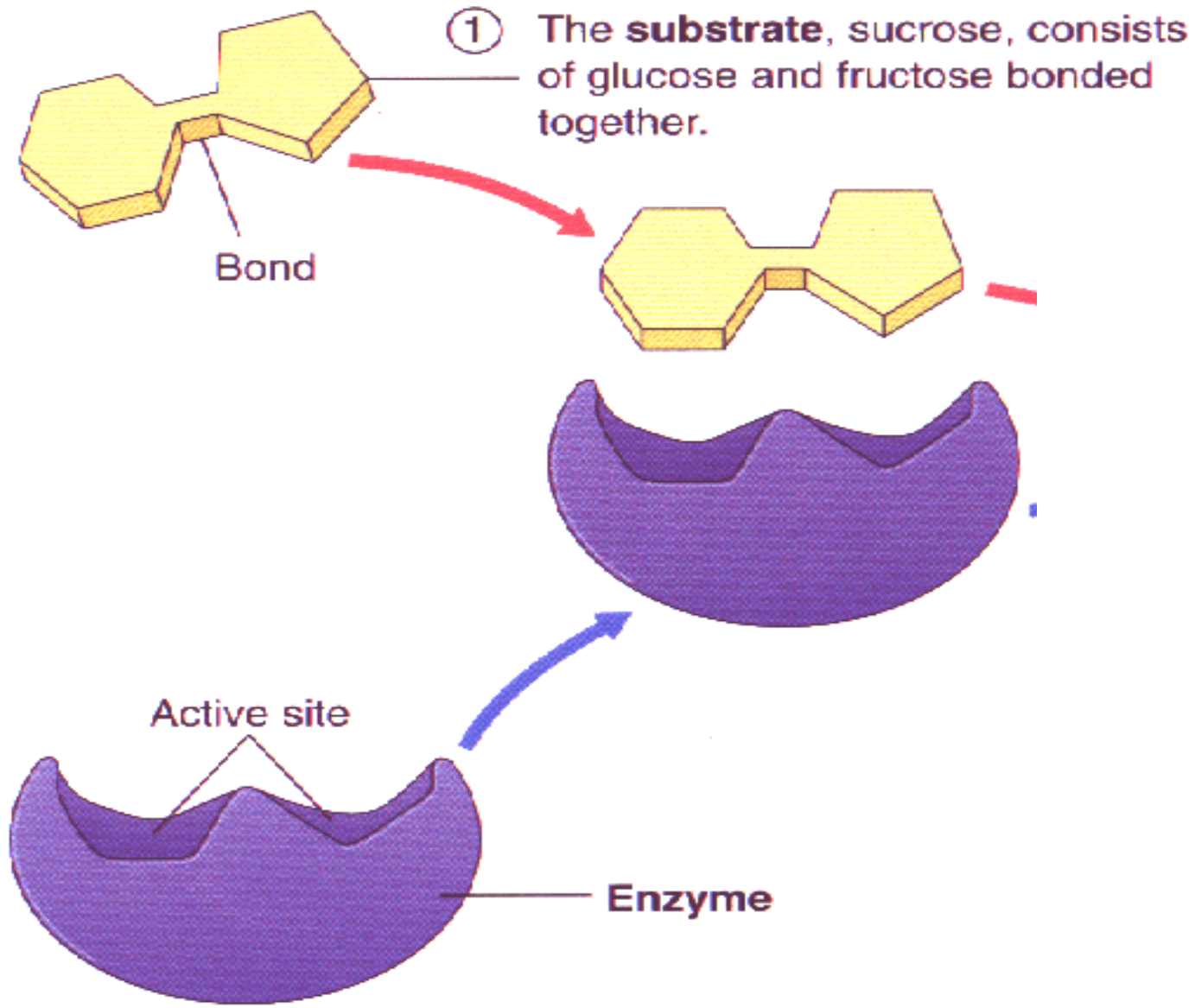


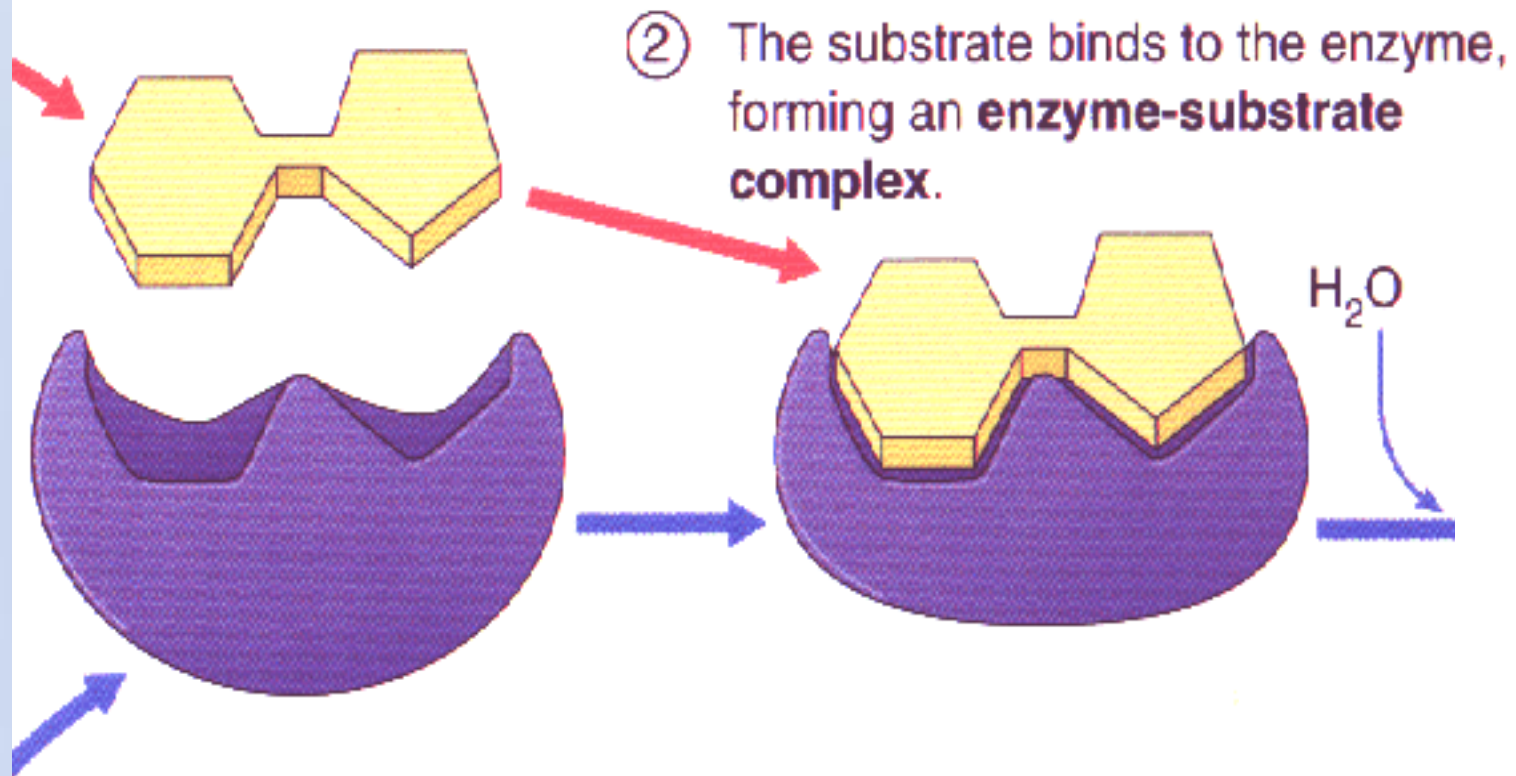
**5. Draw This!!**



Active site

Enzyme

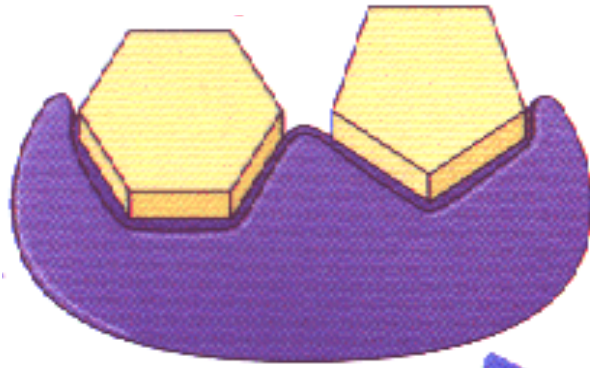




② The substrate binds to the enzyme, forming an **enzyme-substrate complex**.

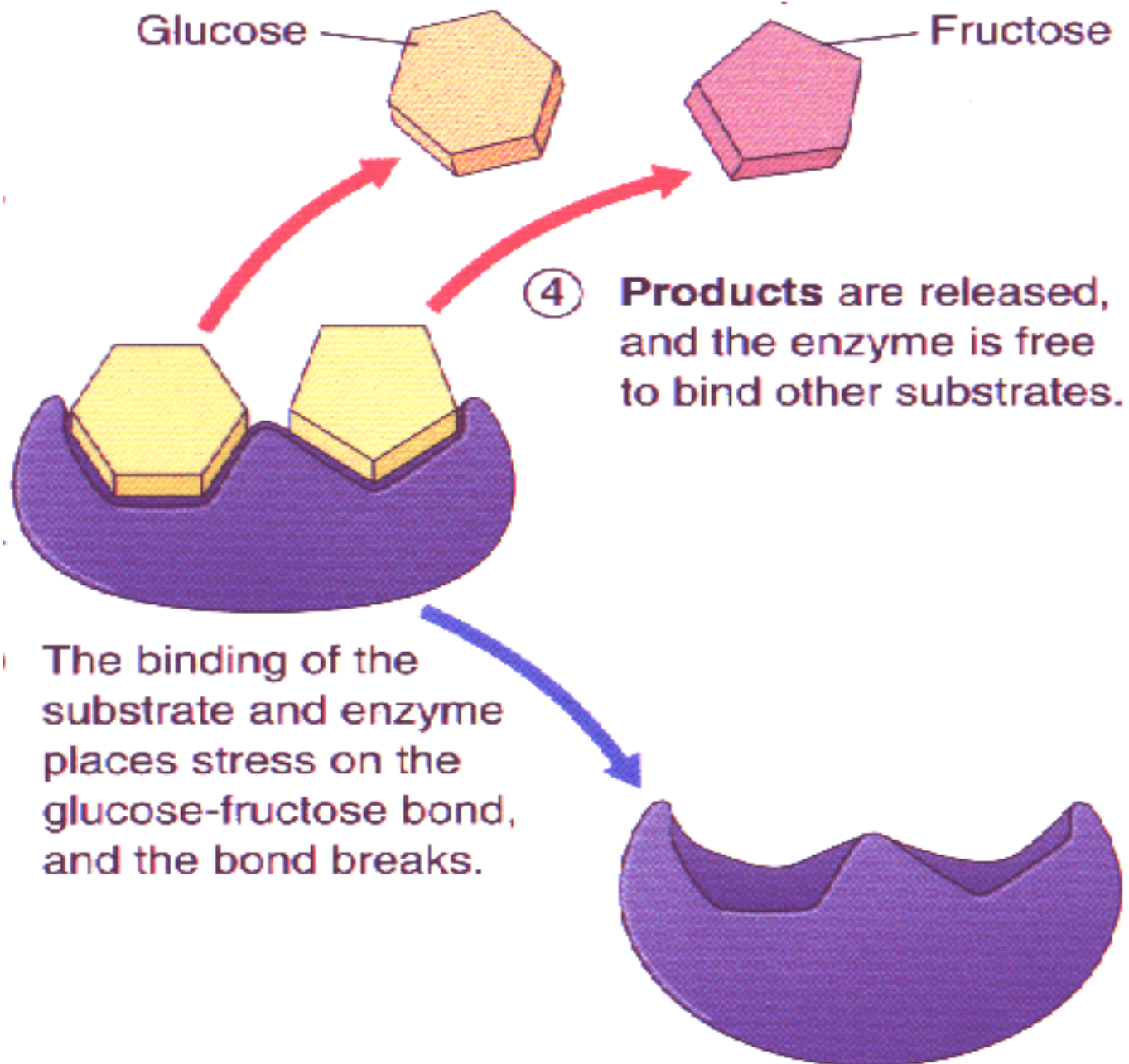
$H_2O$



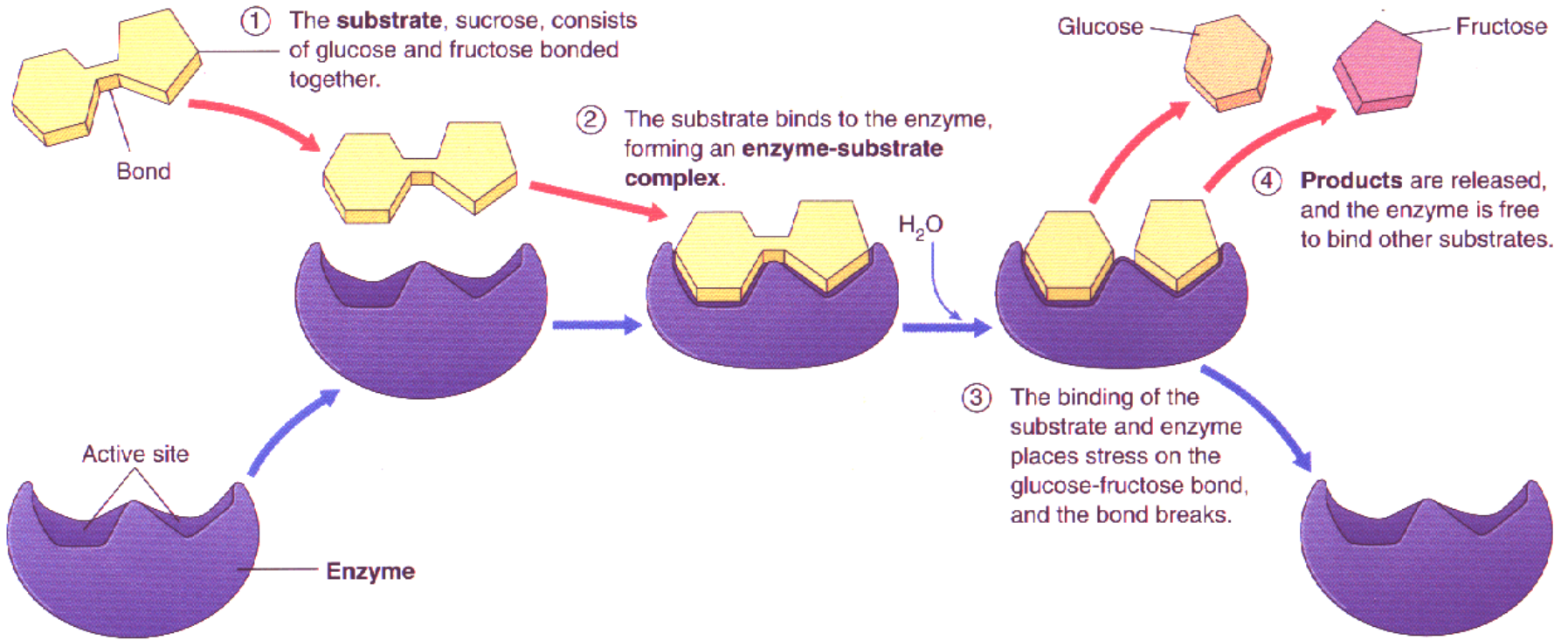


- ③ The binding of the substrate and enzyme places stress on the glucose-fructose bond, and the bond breaks.



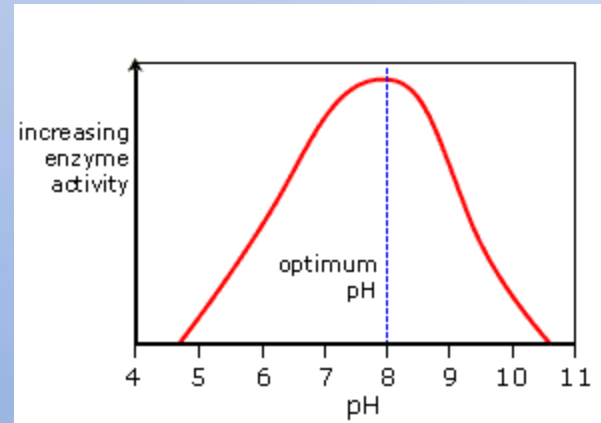


# Enzyme Action!



# 7. Factors that affect Enzyme Activity

All enzymes operate within a narrow range of these factors:



- Temperature
- pH
- Substrate Concentration

