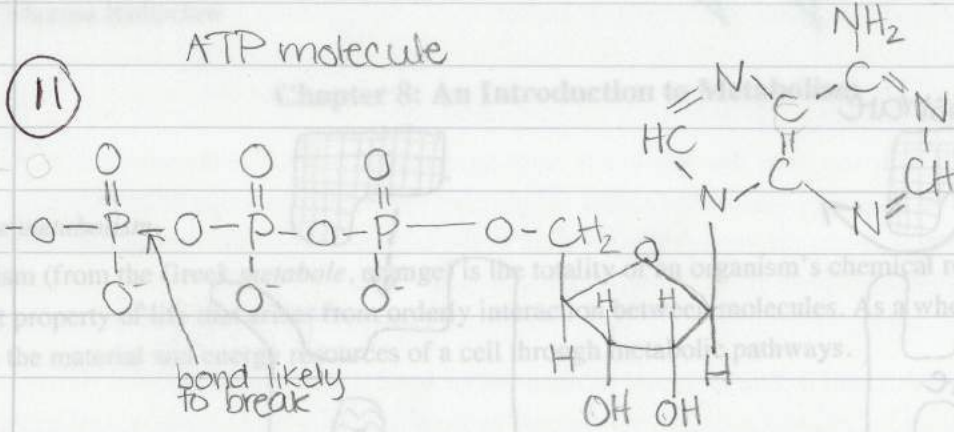
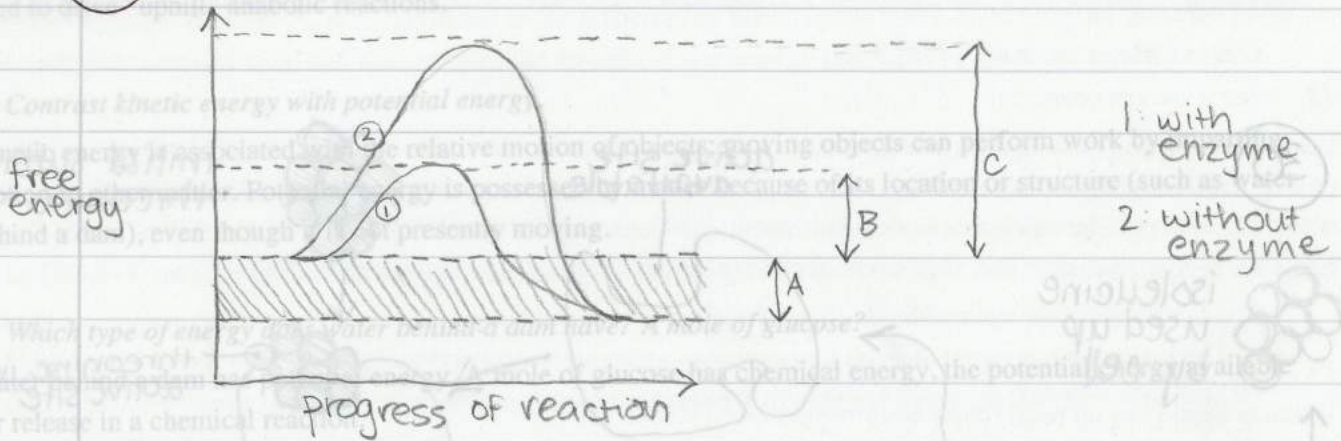


# CHAPTER 8: METABOLISM

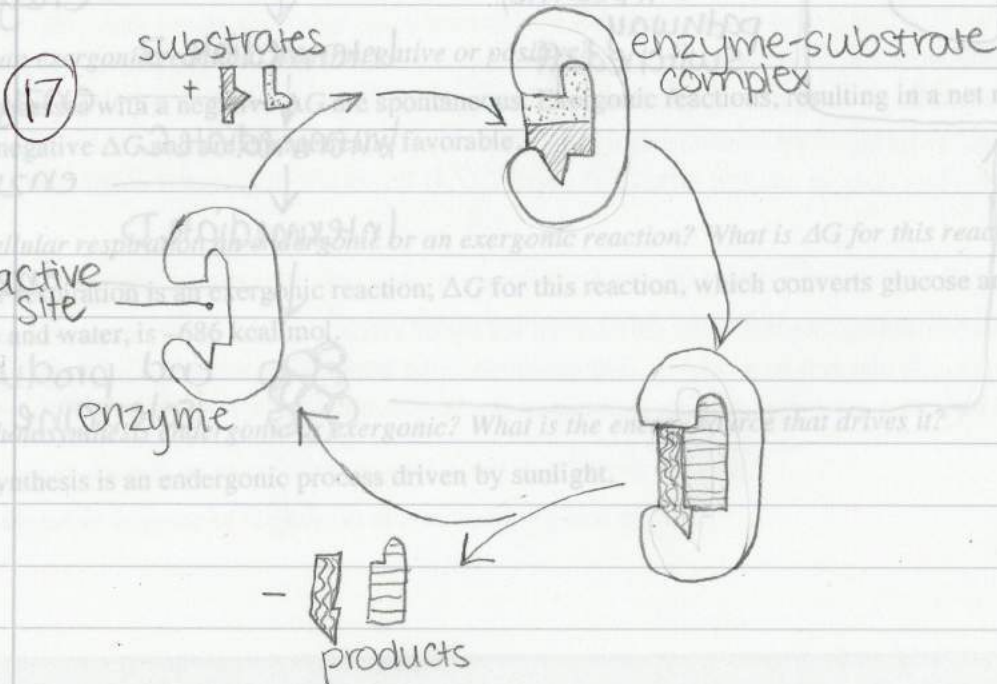
Keller 12d  
31.8.14



(16) Enzyme Effect

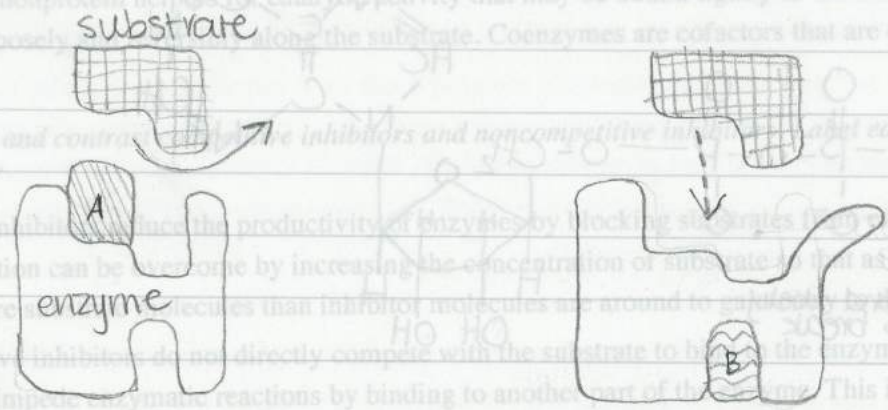


A:  $\Delta G$  (same with or without enzyme)  
B:  $E_A$  with enzyme (lower)  
C:  $E_A$  without enzyme (higher)



# CHAPTER 8

25



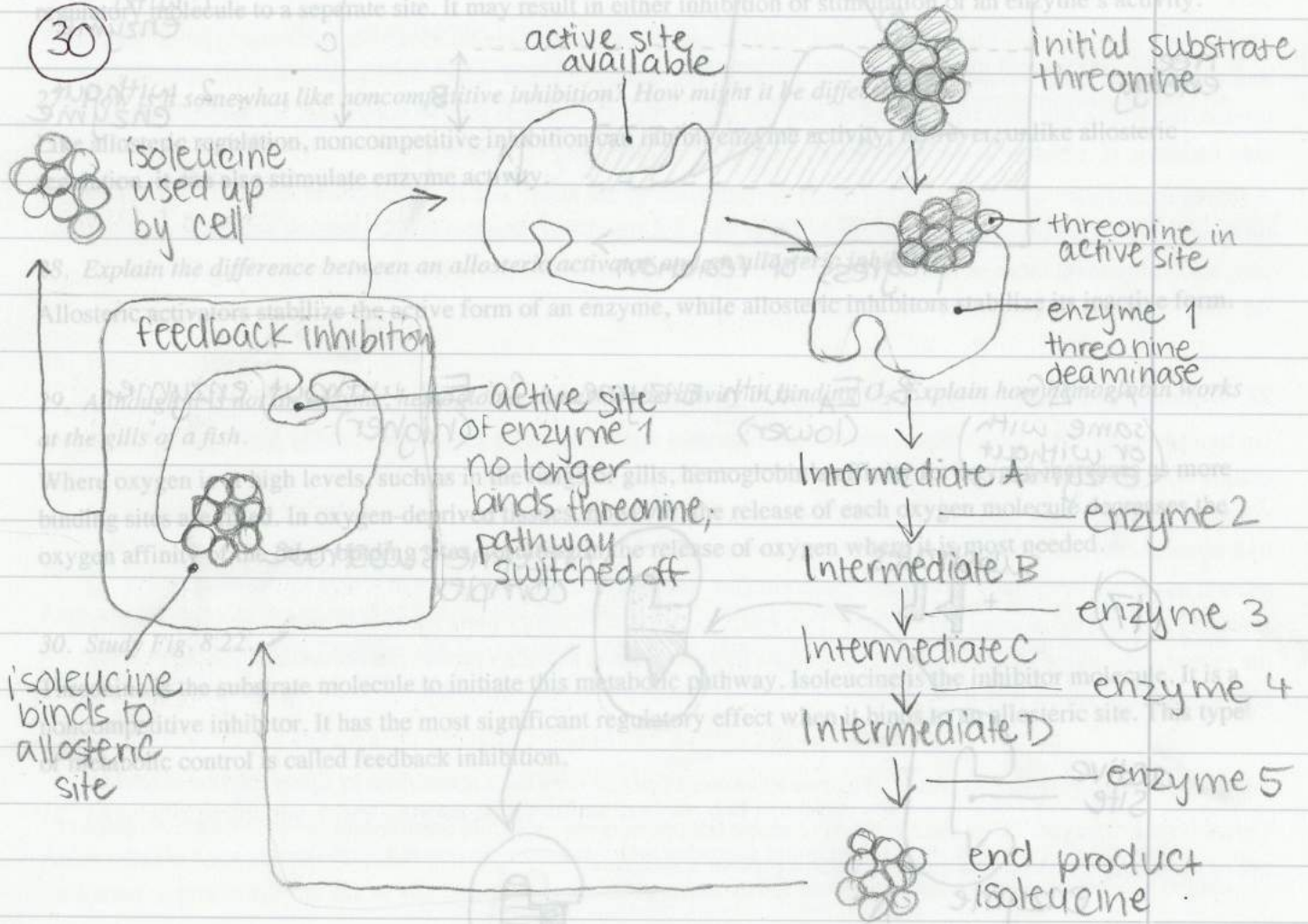
A: competitive inhibitor

B: noncompetitive inhibitor

26. What is allosteric regulation?

Allosteric regulation refers to any case in which a protein's function at one site is affected by the binding of a molecule to a separate site. It may result in either inhibition or stimulation of an enzyme's activity.

30



isoleucine used up by cell

Initial substrate threonine

active site available

threonine in active site

enzyme 1 threonine deaminase

feedback inhibitor

active site of enzyme 1 no longer binds threonine; pathway switched off

Intermediate A

enzyme 2

Intermediate B

enzyme 3

Intermediate C

enzyme 4

Intermediate D

enzyme 5

end product isoleucine

isoleucine binds to allosteric site