

reactions can be
SPONTANEOUS
but too
SLOW
ex: waterfall v. marsh

activation energy: initial energy to
start a reaction
↳ often in form of heat
↳ weakens bonds

E_a

enzymes: proteins, catalysts

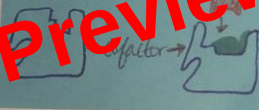
↳ lower E_a for
spontaneous reactions

- template
- weaken substrate bonds
- microenvironment
- bonds briefly

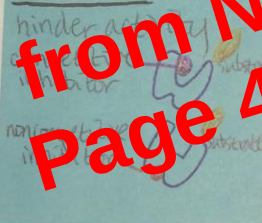
enzyme + substrate → enzyme-substrate complex → enzyme + products

* speed up already
spontaneous reactions

cofactors
helper for
catalysis



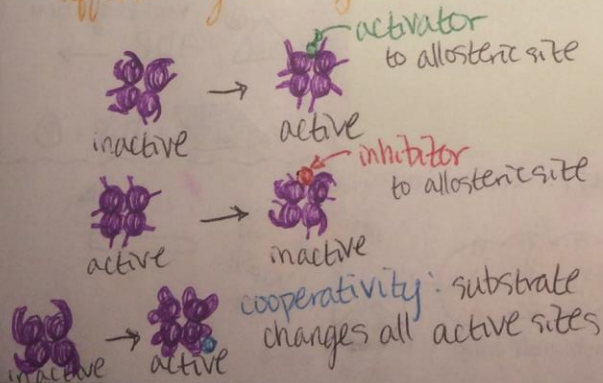
inhibitors



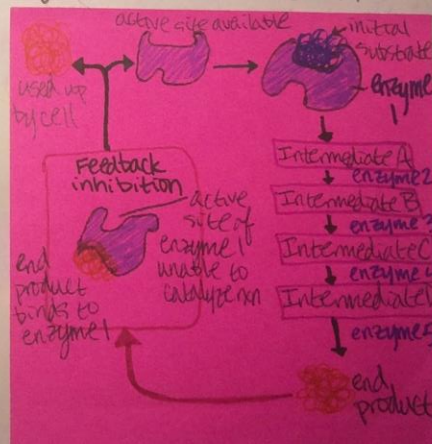
enzyme activity
affected by:
• temperature
• pH

Preview from Notesale.co.uk
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allosteric regulation:
enzyme structure & function
affected by binding molecules



feedback inhibition



* product binds to allosteric site