

Proteins

REUSABLE!

end in -ase

Enzymes

FIT TOGETHER LIKE
LOCK & KEY



CATALYST!

**substrate -
specific**

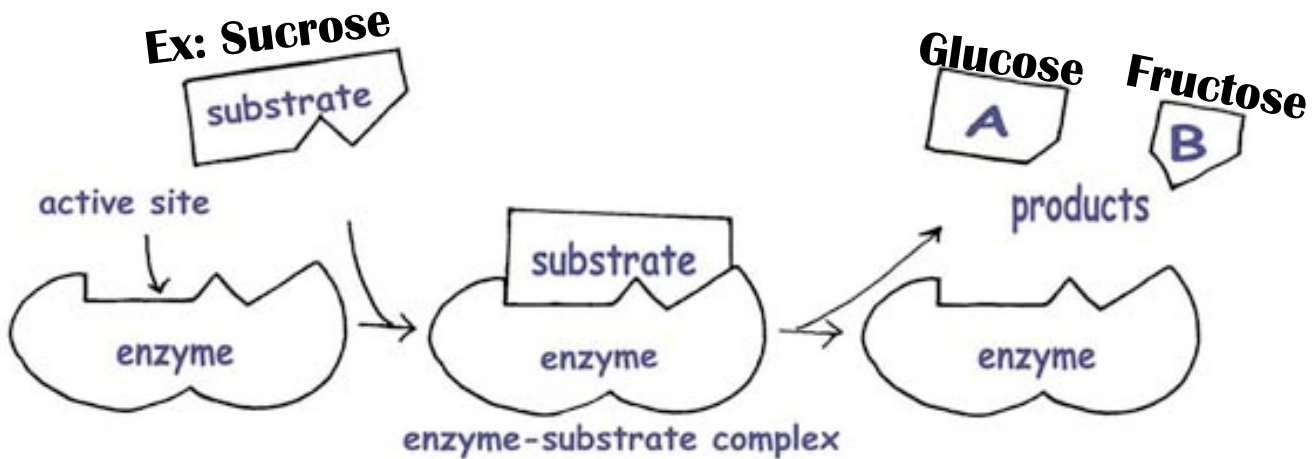
Don't denature my active site!

Work on substrates

Important info about enzymes

- ✓ speed up (increase) rate of chemical reaction = CATALYST
- ✓ lower activation energy required to start a reaction
- ✓ speed up rate of food digestion (metabolism)
- ✓ cause molecules (substrate to change chemically)
 - ✓ can be broken apart or put together
- ✓ folded shape of protein matches the substrate. Enzyme will only work on specific substrate (substrate-specific)
- ✓ end in -ase
- ✓ enzyme activity depends on temperature, pH, amount of substrate
- ✓ denature = enzyme's active site is damaged, and can no longer bind to substrate

What do they look like?



Enzyme remains unchanged and can be RE-USED!