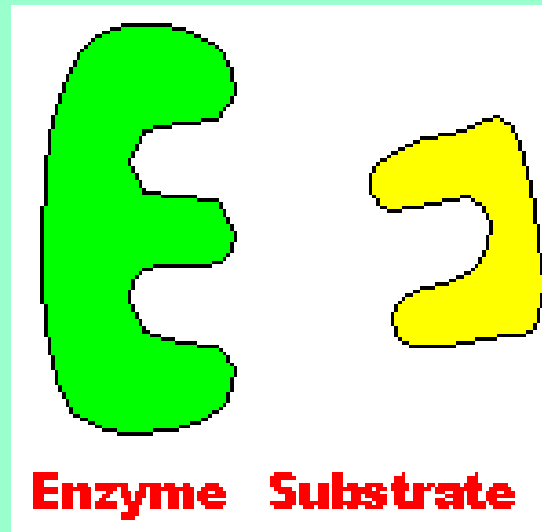


ENZYMES

2-4



Slide Show by Kelly Riedell/Brookings Biology

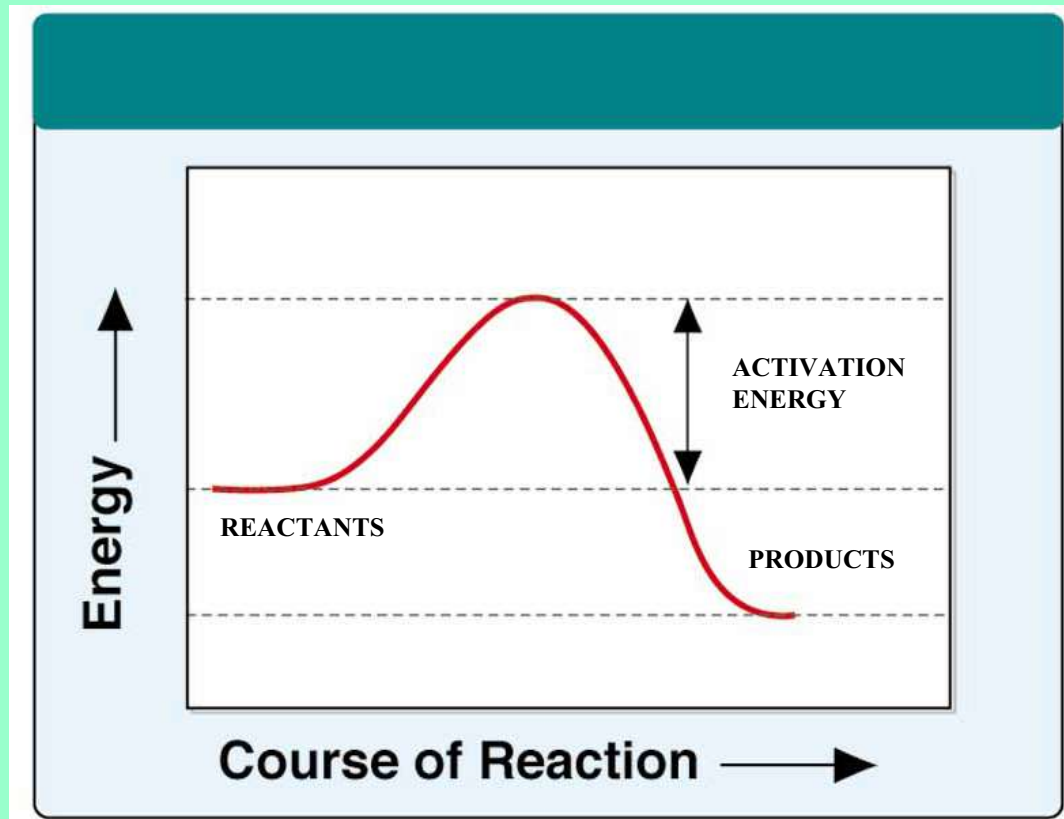
Chemical reactions need help to get started.

Ex: A fire needs a match to get it started.

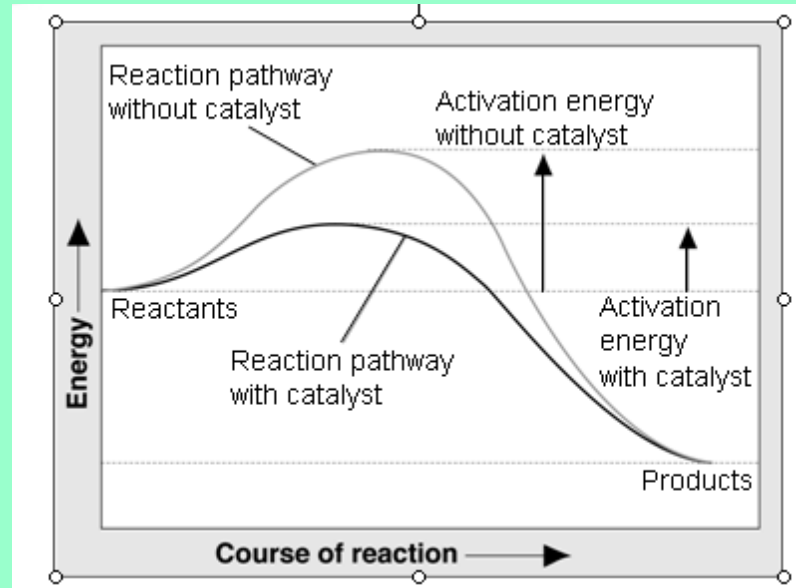


_____ to get a chemical
reaction _____

= _____

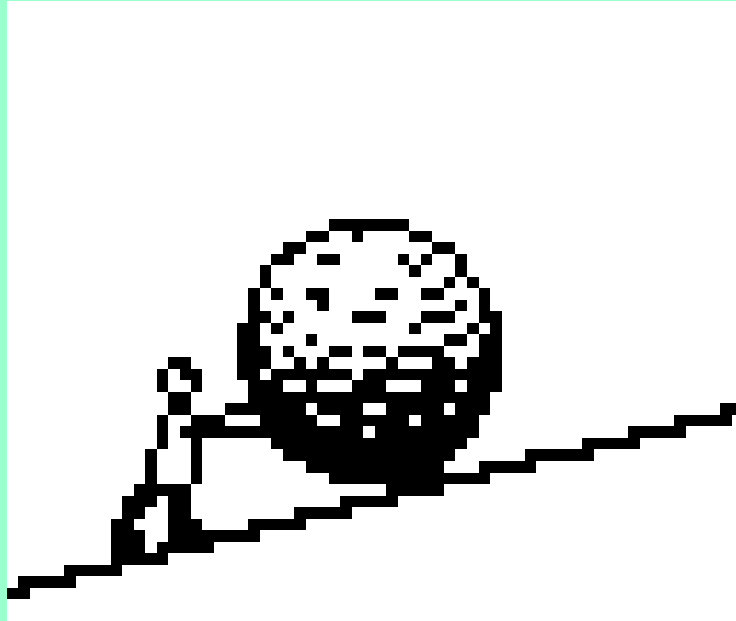


HELP CHEMICAL REACTIONS



Catalysts work by _____ the
_____ to get a
chemical reaction started.

IT'S LIKE PUSHING A SNOWBALL UP A HILL



Once it gets to top . . .
it can roll back all by itself

CATALYSTS in Living Things



In living systems
_____ that
_____ to
control chemical reactions
are called

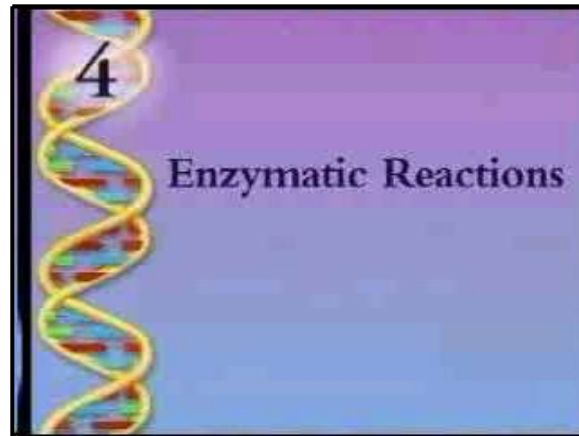
=

SEE ANIMATION
of AMYLASE

More about this in Chapters 7,8,9 and 12

Video 4

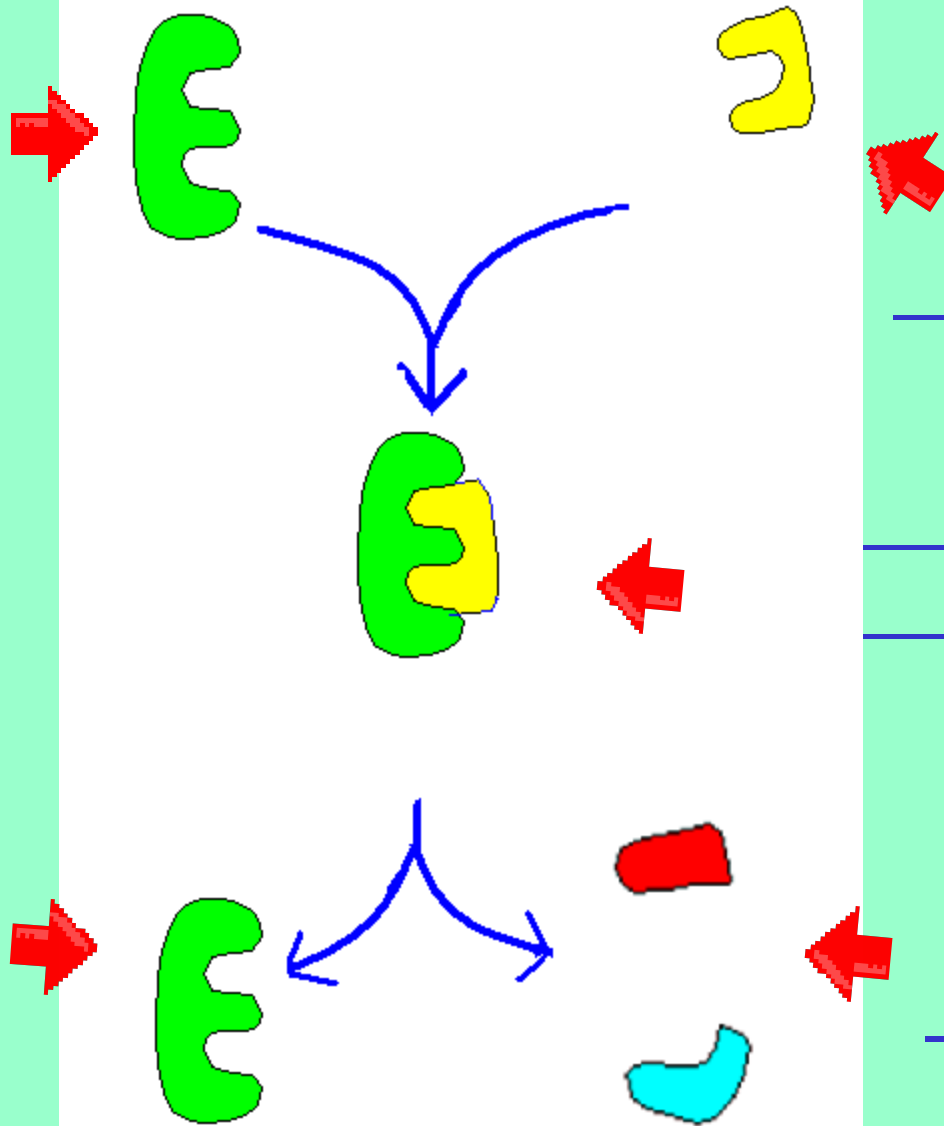
Enzymatic Reactions 2D



Click the image to play the video segment.



PROTEINS CAN BE ENZYMES



Click HERE to
learn more about enzymes



ES _____ like

to only _____ of _____.

Enzymes are _____ by the
reaction and _____

FACTORS THAT AFFECT ENZYME ACTIVITY

&

Conditions that are TOO ACIDIC
or TOO HOT cause proteins to

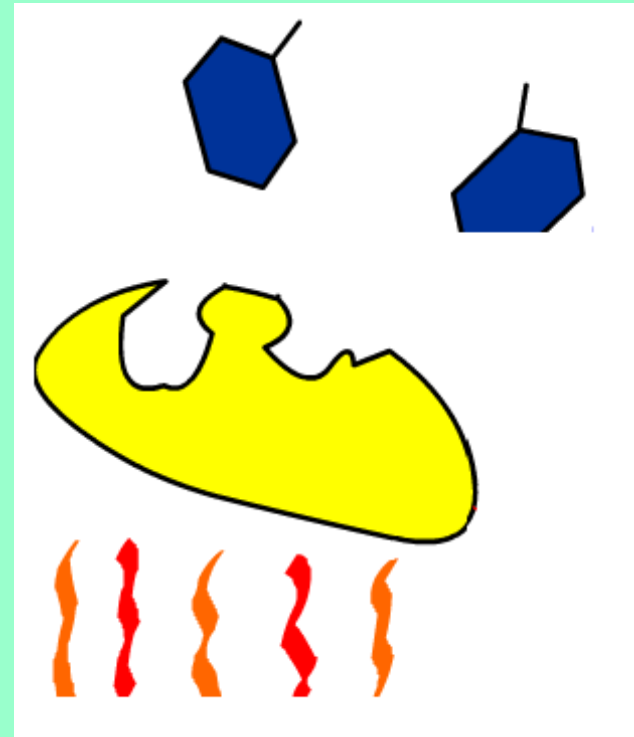
or



See a movie



Denaturing _____ the _____ of the
_____ so enzyme
_____ to _____



_____ (keeping pH and temperature
constant) is _____ for maintaining

**Many enzyme NAMES end in _____
and the beginning of the name tells what it
does**

**DNA Polymerase= “polymerizes”
joins monomers to make DNA**

**Protease=
breaks down proteins**

ATP synthase= synthesizes ATP

MAKE CONNECTIONS

How is the *SHAPE* of an enzyme related to its *FUNCTION*?

