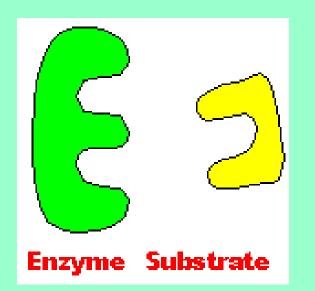
ENZYMES 2-4



Slide Show by Kelly Riedell/Brookings Biology

http://www.biologie.uni-hamburg.de/b-online/library/cat-removed/enzyme_.gif

Chemical reactions need help to get started.

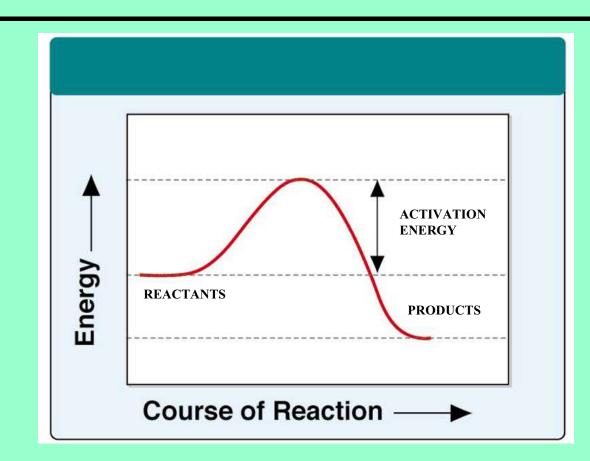
Ex: A fire needs a match to get it started.





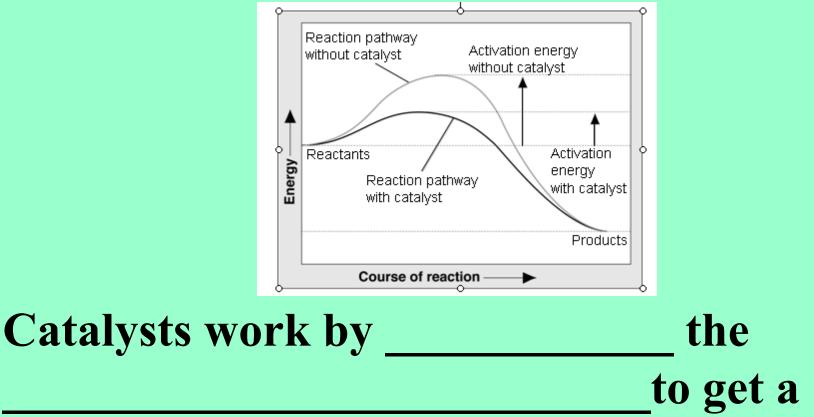
to get a chemical

reaction



HELP CHEMICAL

REACTIONS



chemical reaction started.

IT'S LIKE PUSHING A SNOWBALL UP A HILL



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

http://www.gifs.net

Image from: http://www.hillstrath.on.ca/moffatt/bio3a/digestive/enzanim.htm

CATALYSTS in Living Things

In living systems that to control chemical reactions are called

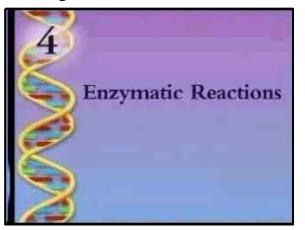
SEE ANIMATION of AMYLASE

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

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Biology Video 4

Enzymatic Reactions 2D



Click the image to play the video segment.

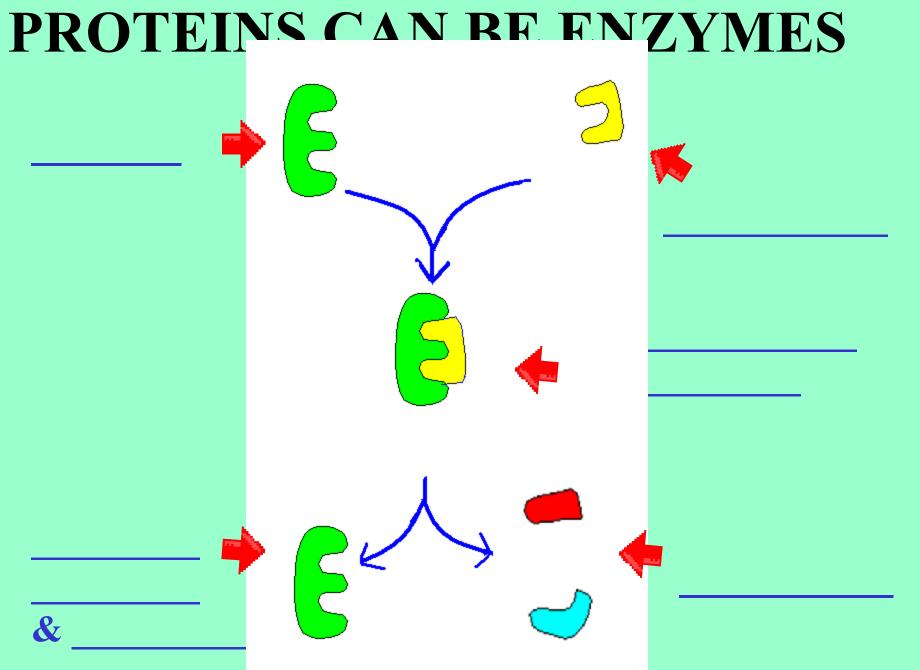
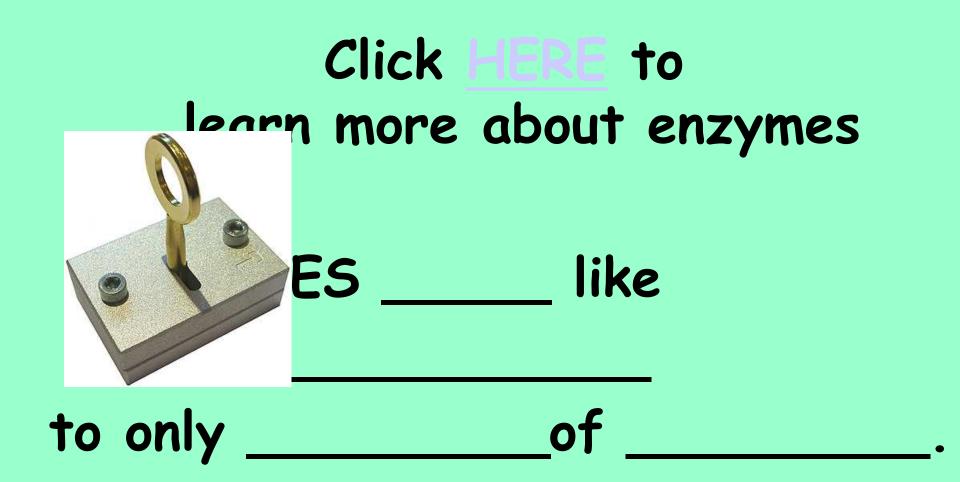


Image modified from: http://www.biologie.uni-hamburg.de/b-online/library/cat-removed/enzyme_.gif Arrow: http://www.gifanimations.com/action/ImageDisplay/1/2/11/next



by the

Enzymes are _ reaction and

http://www.grand-illusions.com/images/articles/toyshop/trick_lock/mainimage.jpg

FACTORS THAT AFFECT ENZYME ACTIVITY &

Conditions that are TOO ACIDIC or TOO HOT cause proteins to



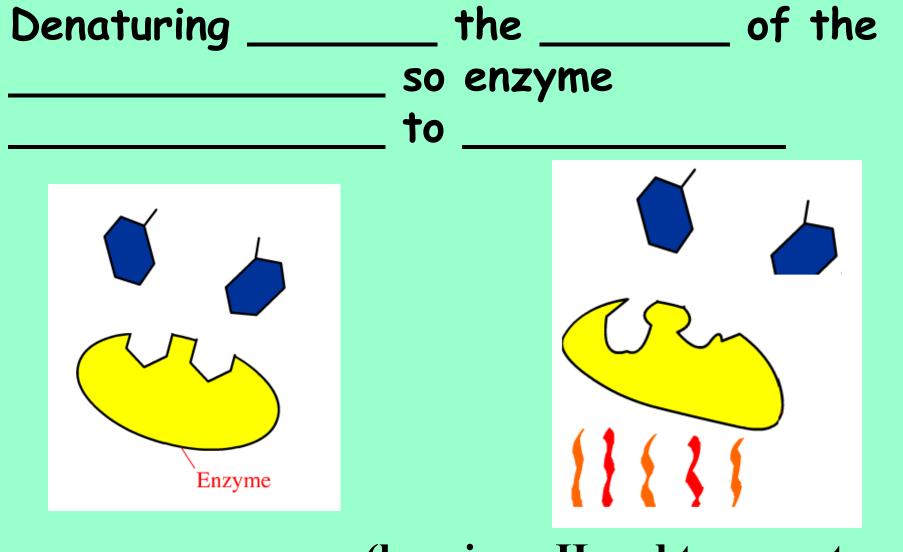
See a movie

or



http://www.desktopfotos.de/Downloads/melt_cd.jpg

http://www.nealbrownstudio.com/adm/photo/163_nb_fried_egg.jpg



(keeping pH and temperature for maintaining

constant) is

Image modified from: http://www.lewport.wnyric.org/jwanamaker/animations/Enzyme%20activity.html

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?

