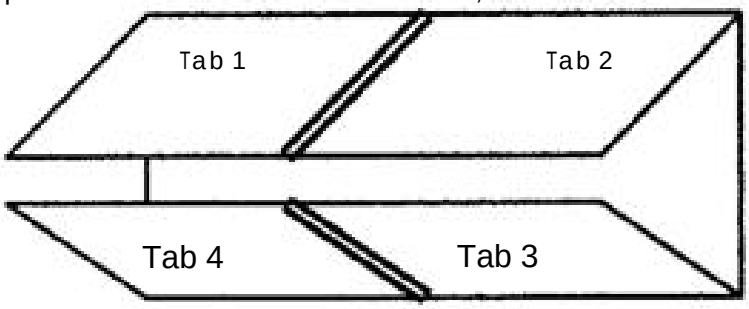
DON'T FORGET TO WRITE YOUR NAME ON YOUR FOLDABLE!!!

Enzyme Foldable Instructions

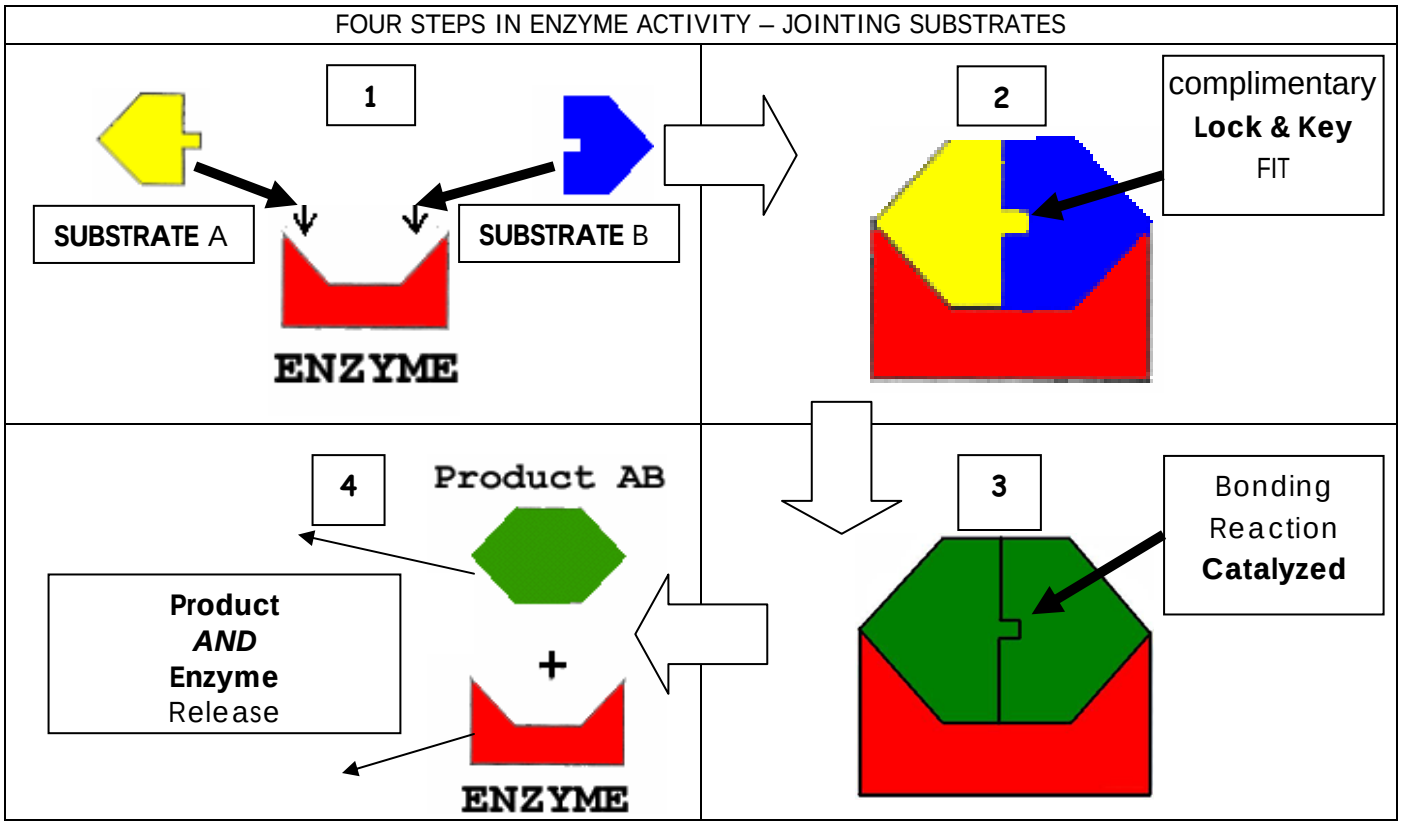
Step 1: Use the foldable pattern below to create a four-tab, shutter fold as shown below



Step 2: On the back of the foldable, title your work today as "**FOUR STEPS IN ENZYME ACTIVITY – JOINING SUBSTRATES**"

Step 3: On the **FRONT** of each tab, ***draw and color*** the 4 general steps of enzyme activity using the sketch below. Color the enzyme RED in every step.

The substrate A will be = YELLOW, the substrate B will be = BLUE, and the end product GREEN.



Step 4: On the **INSIDE** of each tab, use your notes and LIST the following:

a. Tab 1 – Meaning of the words ENZYME, SUBSTRATE, & ACTIVE SITE
b. Tab 2 – Explanation of "complimentary FIT / LOCK AND KEY"
c. Tab 3 – Definition of the word "CATALYST" and its relationship to "ACTIVATION ENERGY."
d. Tab 4 – Explanation of which substances (SUBSTRATES, PRODUCTS, AND ENZYMES) have permanently changed and which ones are not changed.
e. In the center - List 4 examples of important enzymes and their functions.

ENZYME HAND PRINT ACTIVITY

Step 1: On a blank piece of colored paper, spread your hand out as wide as possible so that all of it still fits on the paper.

Step 2: Trace around your hand so that your hand print is on the paper

Step 3: Label the top of your paper with the title of the subject "5 Facts About Enzymes"

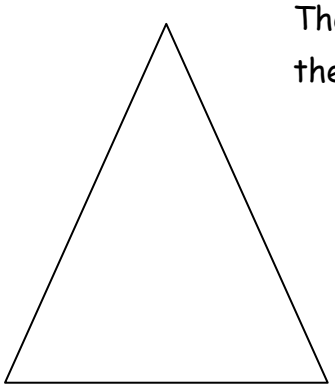
Step 4: Number each of your fingers, in order, from 1 to 5 with large numbers. It does not matter which side you start on.

Step 5: Write within each of the fingers and thumb the 5 facts that are true of ALL enzymes.

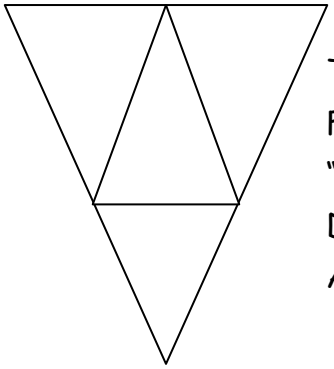
1. Enzymes are **HIGHLY SPECIFIC!**
2. Enzymes are **REUSABLE!**
3. Enzymes are **BIOLOGICAL CATALYSTS!**
4. Enzymes are **FRAGILE – ABLE TO BE DENATURED EASILY!**
   !!!!! The most important feature to an enzyme is its SHAPE !!!!!!!!
5. Enzymes work in **ONE DIRECTION OR THE OTHER, BUT NOT BOTH!**

Step 6: Just outside the fingers, EXPLAIN WHAT EACH OF THESE STATEMENTS MEANS!

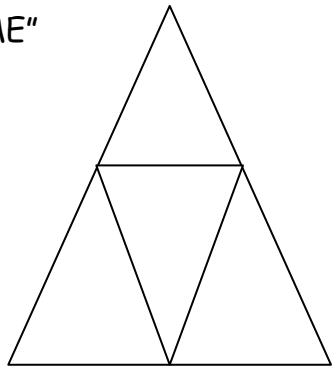
Step 7: On the back of the paper, draw a very large triangle the full size of the paper:



Then, turn the paper upside down and draw a smaller triangle inside the big triangle:



Then, turn the paper back over and Fill in the center with:
"THREE THINGS THAT WILL DENATURE
AN ENZYME"



Step 8: List the three factors that affect the activity of the Enzyme in each of the three corner triangles.