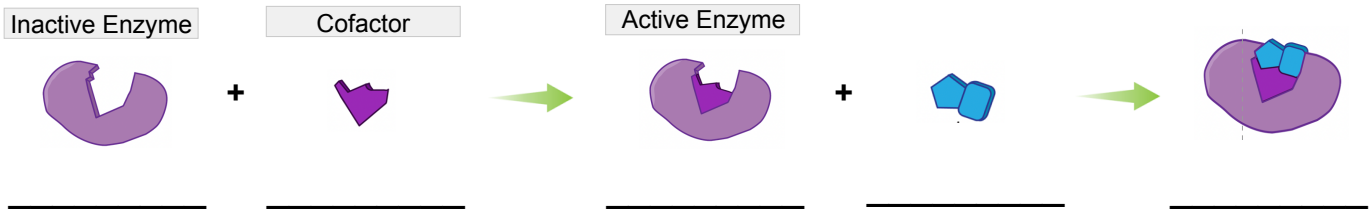
CONCEPT: INTRO TO COFACTORS

- Some enzymes require the use of a *cofactor* in order to catalyze a chemical reaction.
  - □ **Cofactor**: a _____peptide covalently bonded to an enzyme that is essential to its catalytic activity.
    - Inorganic cofactor = _____ Ion
    - Organic Cofactor = _____
  - □ **Apoenzyme** = _____ enzyme form.
  - □ **Holoenzyme** = _____ enzyme form.

Enzyme Activation



_____ _____ _____ _____ _____

EXAMPLE: Which of the following could be a cofactor, but not a coenzyme?

a) FAD b) NAD^+ c) Mg^{2+} d) Coenzyme A

PRACTICE: Indicate which of the following conditions represents an active enzyme.

I. An enzyme after its release of Cu (I) ion used for catalytic activity.

II. A polypeptide chain that is biologically functional.

III. An enzyme that binds to organic factor in the form of Vitamin B_2.

IV. None of the following

a) IV only b) I and II c) II and III d) I, II and III