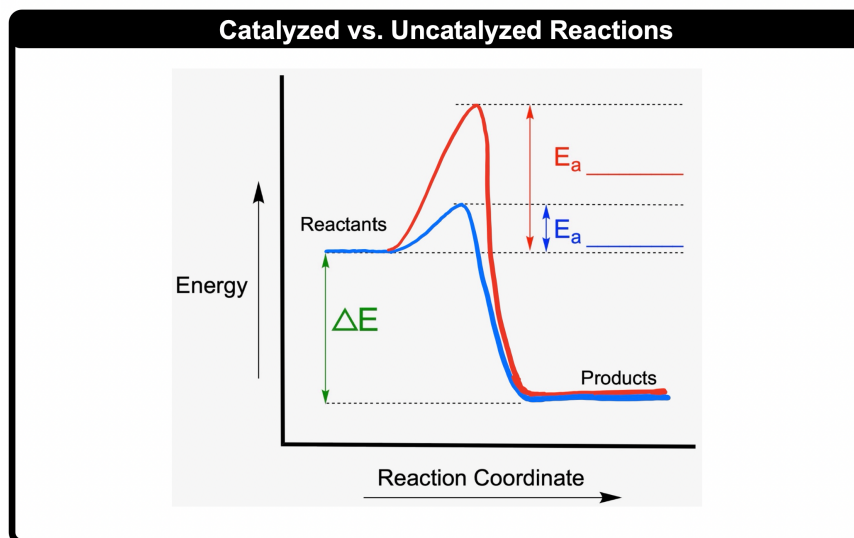
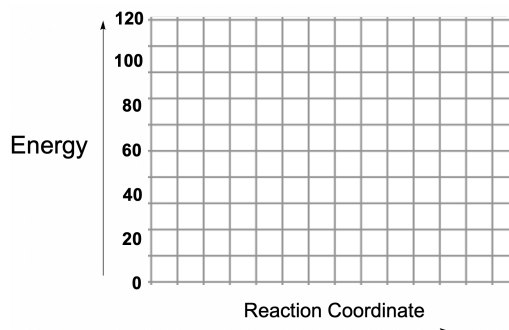
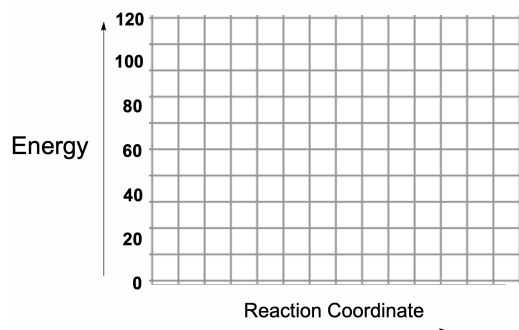


CONCEPT: CATALYST

- Any substance that _____ the rate of a reaction by _____ E_a and not being consumed in the process.



EXAMPLE: A certain reaction has an enthalpy value of -20 kJ and an activation energy of 40 kJ. A catalyst is found that lowers the activation energy of the reaction by 10 kJ. What is the total difference in energy between the products and the transition state?



PRACTICE: Which of the following statements is true regarding the energy diagram provided?

- The reaction is endothermic.
- Activation energy would be less than $+10$ kJ after a catalyst is added.
- The reaction absorbs energy.
- Activation energy would be greater than $+10$ kJ after a catalyst is added.

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

