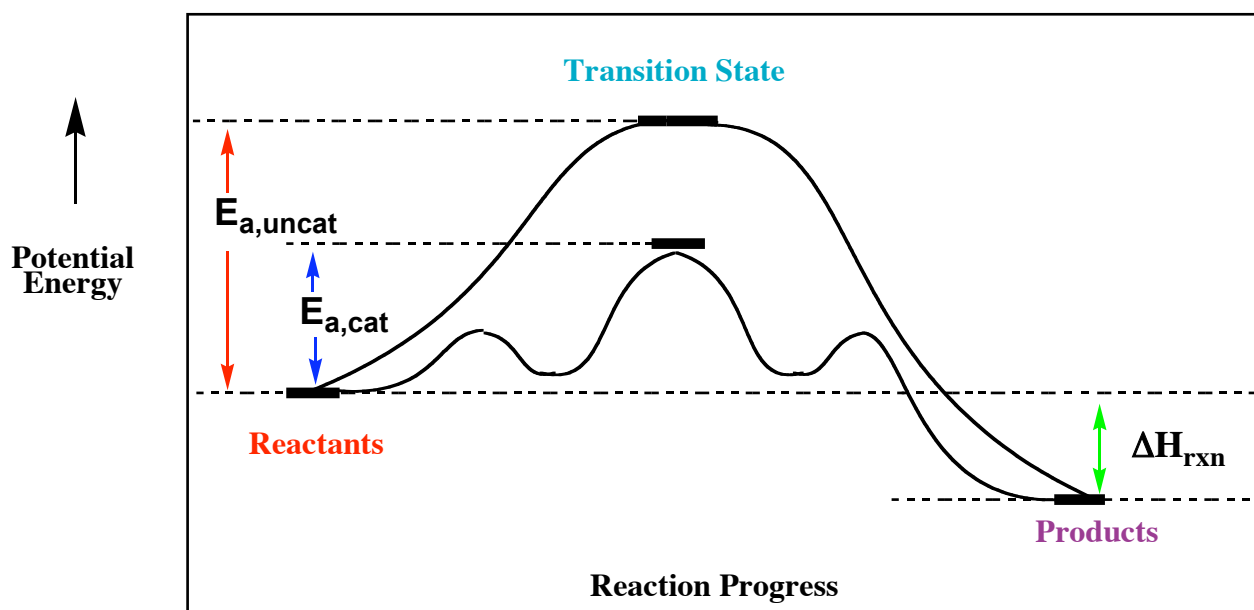


CATALYSTS



*Catalysts alter the mechanism of a reaction resulting in the lowering of the **Activation Energy** of the reaction.*

- Catalysts are not used up in the reaction they are reactants in early elementary steps and products in later steps
- Catalysts speed up both the forward and reverse reactions
- Catalysts do not change the final equilibrium

$$\frac{k_{\text{cat}}}{k_{\text{uncat}}} = e^{\left(\frac{E_{a,\text{uncat}} - E_{a,\text{cat}}}{RT}\right)}$$