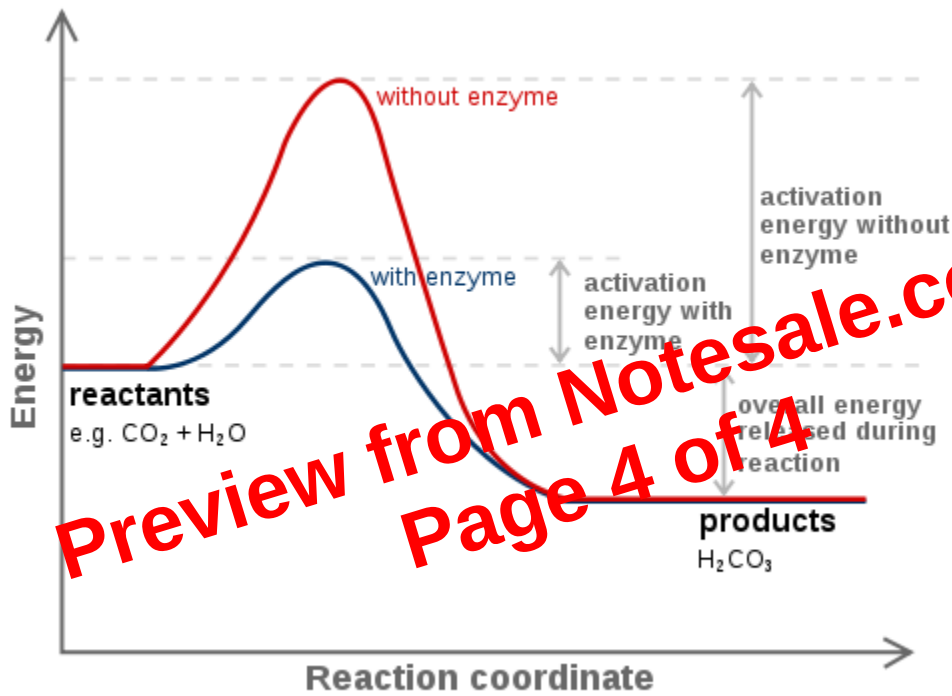


Activation energy

The activation energy is the energy that is required for a reaction to occur. Enzymes have the ability to lower the activation energy in order to increase the rate of reaction. Only the reaction will speed up but the change in energy will remain the same between the start and end of a reaction.



(Wikibooks, 2015)

COLLISION THEORY AND ENZYMES

The collision theory provides an understanding for how the rate of a chemical reaction can be limited by physical properties. The collision theory states that for a reaction to occur, molecules must:

- 1- Collide with one another
- 2- Collide with enough energy to overcome the energy barrier: **the activation energy.**
- 3- Collide in the right direction