

Term	Definition
Activated Complex	an intermediate structure formed in the conversion of reactants to products. The activated complex is the structure at the maximum energy point along the reaction path
Activation Energy	The minimum energy required to convert reactants into products; the difference between the energies of the activated complex and the reactants
Catalyst effect on the rate chemical of rxn	a substance that is neither a reactant nor a product, but functions to speed up the rate of a chemical reaction by lowering activation energy/providing a shorter or "alternate" pathway
Chemical Equilibrium	in a chemical reaction, when the forward and reverse reactions are occurring at equal rates
Collision Theory	in order for a chemical reaction/effective collision to occur, particles must collide with proper energy AND proper alignment.
Concentration effect on the rate chemical of rxn	an increase in concentration of reactants will increase the rate of a chemical reaction
Endothermic Reactions	chemical reactions that consume or require energy; chemical reactions in which energy is a reactant
Enthalpy	the heat energy absorbed or released during a chemical reaction
Entropy	a measure of the randomness or chaos associated with a chemical reaction
Equilibrium	when two opposing processes are occurring at equal rates
Exothermic Reactions	chemical reactions that produce or release energy; chemical reactions in which energy is a product
Le Chatelier's Principle	predicts that when a stress is applied to an equilibrium mixture, the equilibrium will shift to relieve the stress (stresses include temperature, pressure, concentration)
Nature of Reactants effect on the rate chemical of rxn	reactions involving ionic substances tend to have faster rates than reactions involving covalent substances.
Phase Equilibrium	when the processes of freezing and melting or evaporating and condensing are occurring at equal rates
Physical Equilibrium	when two opposing physical processes are occurring at equal rates; ex: phase equilibrium, solution equilibrium (saturation)
Potential Energy Diagrams	used to illustrate the energy lost or gained (the reaction pathway) for a given chemical reaction
Pressure effect on the rate chemical of rxn	an increase in pressure will increase the rate of a chemical reaction (only for reactions involving GASES!)
Reaction Mechanism	the specific set of steps/reactions involved in an overall chemical reaction
Reaction Rate	the speed at which reactants are converted into products in a chemical reaction.

Term	Definition
Solution Equilibrium	when the processes of dissolving and precipitating are occurring at equal rates; when a solution has reached its saturation point
Surface Area effect on the rate chemical of rxn	an increase in the surface area of reactants will increase the rate of a chemical reaction
Temperature effect on the rate chemical of rxn	an increase in temperature will increase the rate of a chemical reaction