

Essential Concepts

temperature, energy, heat, work

path variable, state variable

internal energy, heat capacity, equipartition

ideal gas, real gas, equation of state

isothermal, adiabatic

enthalpy, free energy, entropy

spontaneity, reversible, irreversible

equilibrium

chemical potential

mixing

rate of reaction, rate constant

reaction order, molecularity

intermediate, steady-state approximation

chain reaction, branching chain

collision frequency, activation. transition state