

vector (矢量)
 scalar (标量)
 unit vector (单位矢量)
 scalar (dot) product (点积)
 vector (cross) product (叉积)
 variation (变分)
 differentiation (微分)
 representation (表示)
 particle(质点)
 position(位置) displacement(位移)
 average velocity (平均速度)
 instantaneous velocity(瞬时速度)
 average acceleration(平均加速度)
 instantaneous acceleration(瞬时加速度)
 normal component(法向分量)
 tangential component(切向分量)
 dynamics(动力学), Force(力), mass(质量)
 Superposition(叠加), net force(合力)
 Newton's law of motion(牛顿运动定律)
 Inertia(惯性), equilibrium(平衡)
 Action-reaction pair(作用力与反作用力)
 Elasticity(弹力), Tension(张力)
 Friction force(摩擦力)
 Gravitational interaction(万有引力)
 Free-body diagram(隔离体受力图)
 periodic motion oscillation
 restoring force amplitude cycle period frequency angular
 frequency simple harmonic motion harmonic oscillator circle of reference
 phasor phase angle simple pendulum
 Damping
 Damped oscillation
 Critical damping
 overdamping
 underdamping
 driving force
 forced oscillation
 natural angular frequency
 resonance
 Work(功), Power(功率)
 Joule(焦耳), Watt(瓦特)
 Conservative force(保守力)
 Nonconservative force(非保守力)
 Dissipative force(耗散力)
 Kinetic energy(动能), Potential energy(势能)

Total mechanical energy(总机械能)
Work-energy theorem(功能原理)
Conservation of mechanical energy(机械能守恒)
Law of conservation of energy(能量守恒定律)
momentum(动量)
impulse(冲量)
impulse-momentum theorem(动量定理)
principle of conservation of momentum(动量守恒)
elastic collision(弹性碰撞)
inelastic collision(非弹性碰撞)
completely inelastic collision(完全非弹性碰撞)
center of mass(质心)
rigid body(刚体)
radian(弧度) rad (abbreviation for radian)
moment of inertia(转动惯量)
angular momentum(角动量)
torque(力矩)
rotational kinetic energy(转动动能)
parallel-axis theorem(平行轴定理)
Conservation of angular momentum(角动量守恒)
mechanical wave(机械波)
medium(媒质)
transverse wave(横波)
longitudinal wave(纵波)
periodic wave(周期波)
sinusoidal wave(正弦波)
wave speed(波速)
wave length(波长)
phase(相位), frequency(频率)
wave function(波函数)
wave equation(波动方程)
Adiabatic process (绝热过程)
Isochoric (constant-volume) process (等容过程)
Isobaric (constant-pressure) process (等压过程)
Isothermal (constant-temperature) process (等温过程)
The average speed (算术平均速率)
The root-mean-square speed (方均根速率)
The most probable speed (最概然速率)
reversible (可逆)
irreversible (不可逆)
quasi-static (准静态)
Entropy (熵)