T1 kinematics	T1 scalar	T1 magnitude
T1 vector	T1 displacement	T1 velocity
T1 acceleration	T1 resolve	T1 unit vectors

T1 大小 dà xiǎo	T1 标量 biāo liàng	T1 运动学 yùn dòng xué
T1 速度 sù dù	T1 位移 wèi yí	T1 矢量 shǐ liàng
T1 单位矢量 dān wèi shǐ liàng	T1 分解 fēn jiě	T1 加速度 jiā sù dù

T1 integrate	T1 position	T1 average velocity
T1 instantaneous velocity	T1 slope	T1 tangent line
T1 speedometer	T1 inverse operations	T1 kinematic equations

T1

平均速度

píng jūn sù dù

T1

位置

wèi zhì

T1

积分

jī fēn

T1

切线

qiè xiàn

T1

斜率

xié lǜ

T1

瞬时速度

shùn shí sù dù

T1

运动学方程

yùn dòng xué fāng chéng

T1

逆运算

nì yùn suàn

T1

速度计

sù dù jì

T1 free fall	T1 air resistance	T1 negligible
T1 reference frame	T1 vector addition	T1 relative motion
T1 independently	T1 projectile motion	T1 parabola

T1 可忽略的 kě hū lüè de	T1 空气阻力 kōng qì zǔ lì	T1 自由落体 zì yóu luò tǐ
T1 相对运动 xiāng duì yùn dòng	T1 矢量相加 shǐ liàng xiāng jiā	T1 参考系 cān kǎo xì
T1 抛物线 pāo wù xiàn	T1 抛体运动 pāo tǐ yùn dòng	T1 独立地 dú lì dì

T1 axis	T1 dot product	T1 cross product
T1 torque	T1 angular momentum	T2 system
T2 center of mass	T2 force	T2 free-body diagram

T1 叉积 chā jī	T1 点积 diǎn jī	T1 坐标轴 zuò biāo zhóu
T2 系统 xì tǒng	T1 角动量 jiǎo dòng liàng	T1 力矩 lì jǔ
T2 受力图 shòu lì tú	T2 力 lì	T2 质心 zhì xīn

T2 Newton's third law	T2 inertia	T2 net force
T2 translational equilibrium	T2 differential equation	T2 incline
T2 tension	T2 Newton's law of gravitation	T2 Friction

T2 合力 hé lì	T2 惯性 guàn xìng	T2 牛顿第三定律 niú dùn dì sān dìng lǜ
T2 斜面 xié miàn	T2 微分方程 wēi fēn fāng chéng	T2 平动平衡 píng dòng píng héng
T2 摩擦力 mó cā lì	T2 万有引力定律 wàn yǒu yǐn lì dìng lǜ	T2 张力 zhāng lì

T2 kinetic	T2 static	T2 normal force
T2 Hooke's law	T2 spring constant	T2 resistive force
T2 terminal velocity	T2 separate the variables	T2 centripetal acceleration

T2 法向力 fǎ xiàng lì	T2 静摩擦 jìng mó cā	T2 动摩擦 dòng mó cā
T2 阻力 zǔ lì	T2 弹簧劲度系数 tán huáng jìn dù xì shù	T2 胡克定律 hú kè dìng lǜ
T2 向心加速度 xiàng xīn jiā sù dù	T2 分离变量 fēn lí biàn liàng	T2 终极速度 zhōng jí sù dù

T3 Kinetic energy	T3 scalar	T3 joules
T3 reference frame	T3 Work	T3 integral
T3 work–energy theorem	T3 friction	T3 normal force

T3 焦耳 jiāo ěr	T3 标量 biāo liàng	T3 动能 dòng néng
T3 积分 jī fēn	T3 功 gōng	T3 参考系 cān kǎo xì
T3 法向力 fǎ xiàng lì	T3 摩擦力 mó cā lì	T3 动能定理 dòng néng dìng lǐ

T3 Potential energy	T3 conservative forces	T3 escape speed
T3 derivative	T3 stable equilibrium	T3 unstable equilibrium
T3 Mechanical energy	T3 nonconservative forces	T3 thermal energy

T3

逃逸速度

táo yì sù dù

T3

保守力

bǎo shǒu lì

T3

势能

shì néng

T3

不稳定平衡

bù wěn dìng píng héng

T3

稳定平衡

wěn dìng píng héng

T3

导数

dǎo shù

T3

热能

rè néng

T3

非保守力

fēi bǎo shǒu lì

T3

机械能

jī xiè néng

T3 turning points	T3 Power	T3 watts
T4 Linear momentum	T4 mass	T4 velocity
T4 vector	T4 collisions	T4 explosions

T3 瓦特 wǎ tè	T3 功率 gōng lǜ	T3 转折点 zhuǎn zhé diǎn
T4 速度 sù dù	T4 质量 zhì liàng	T4 动量 dòng liàng
T4 爆炸 bào zhà	T4 碰撞 pèng zhuàng	T4 矢量 shǐ liàng

T4 system	T4 center of mass	T4 Newton's second law
T4 conveyor belt	T4 rocket	T4 impulse
T4 time integral	T4 impulse–momentum theorem	T4 net force

T4 牛顿第二定律 niú dùn dì èr dìng lǜ	T4 质心 zhì xīn	T4 系统 xì tǒng
T4 冲量 chōng liàng	T4 火箭 huǒ jiàn	T4 传送带 chuán sòng dài
T4 合力 hé lì	T4 冲量-动量定理 chōng liàng - dòng liàng dìng lǐ	T4 对时间的积分 duì shí jiān de jī fēn

T4 force–time graph	T4 area	T4 slope
T4 instant	T4 airbags	T4 crumple zones
T4 Internal forces	T4 net external force	T4 conserved

T4 斜率 xié lǜ	T4 面积 miàn jī	T4 力 – 时间图 lì – shí jiān tú
T4 溃缩区 kuì suō qū	T4 安全气囊 ān quán qì náng	T4 时刻 shí kè
T4 守恒 shǒu héng	T4 合外力 hé wài lì	T4 内力 nèi lì

T4 axis	T4 kinetic energy	T4 elastic collision
T4 inelastic collision	T4 deformation	T4 perfectly inelastic collision
T4 center-of-mass frame	T4 component	T5 rigid body

T4 弹性碰撞 tán xìng pèng zhuàng	T4 动能 dòng néng	T4 坐标轴 zuò biāo zhóu
T4 完全非弹性碰撞 wán quán fēi tán xìng pèng zhuàng	T4 形变 xíng biàn	T4 非弹性碰撞 fēi tán xìng pèng zhuàng
T5 刚体 gāng tǐ	T4 分量 fèn liàng	T4 质心参考系 zhì xīn cān kǎo xì

T5 angular displacement	T5 radians	T5 angular velocity
T5 angular acceleration	T5 tangential acceleration	T5 centripetal acceleration
T5 Torque	T5 vector product	T5 moment arm

T5

角速度

jiǎo sù dù

T5

弧度

hú dù

T5

角位移

jiǎo wèi yí

T5

向心加速度

xiàng xīn jiā sù dù

T5

切向加速度

qiē xiàng jiā sù dù

T5

角加速度

jiǎo jiā sù dù

T5

力臂

lì bì

T5

矢量积

shǐ liàng jī

T5

力矩

lì jǔ

T5 right-hand rule	T5 Rotational inertia	T5 linear density
T5 parallel-axis theorem	T5 net torque	T5 rotational equilibrium
T5 static equilibrium	T5 pulley	T6 rotational kinetic energy

T5

线密度

xiàn mì dù

T5

转动惯量

zhuǎn dòng guàn liàng

T5

右手定则

yòu shǒu dìng zé

T5

转动平衡

zhuǎn dòng píng héng

T5

净力矩

jìng lì jǔ

T5

平行轴定理

píng xíng zhóu dìng lǐ

T6

转动动能

zhuǎn dòng dòng néng

T5

滑轮

huá lún

T5

静平衡

jìng píng héng

T6 rotational inertia	T6 torque	T6 angular displacement
T6 Angular momentum	T6 angular impulse	T6 conserved
T6 rolling without slipping	T6 disk	T6 hoop

T6 角位移 jiǎo wèi yí	T6 力矩 lì jǔ	T6 转动惯量 zhuǎn dòng guàn liàng
T6 守恒 shǒu héng	T6 角冲量 jiǎo chōng liàng	T6 角动量 jiǎo dòng liàng
T6 圆环 yuán huán	T6 圆盘 yuán pán	T6 无滑滚动 wú huá gǔn dòng

T6 centripetal force	T6 satellite	T6 gravitational potential energy
T6 total mechanical energy	T6 escape velocity	T6 elliptical orbit
T6 Kepler's second law	T7 Simple harmonic motion	T7 periodic motion

T6

引力势能

yǐn lì shì néng

T6

卫星

wèi xīng

T6

向心力

xiàng xīn lì

T6

椭圆轨道

tuǒ yuán guǐ dào

T6

逃逸速度

táo yì sù dù

T6

总机械能

zǒng jī xiè néng

T7

周期运动

zhōu qī yùn dòng

T7

简谐运动

jiǎn xié yùn dòng

T6

开普勒第二定律

kāi pǔ lēi dì èr dìng lǜ

T7 equilibrium	T7 restoring force	T7 differential equation
T7 angular frequency	T7 period	T7 frequency
T7 amplitude	T7 phase constant	T7 natural frequency

T7

微分方程

wēi fēn fāng chéng

T7

回复力

huí fù lì

T7

平衡位置

píng héng wèi zhì

T7

频率

pín lǜ

T7

周期

zhōu qī

T7

角频率

jiǎo pín lǜ

T7

固有频率

gù yǒu pín lǜ

T7

相位常数

xiàng wèi cháng shù

T7

振幅

zhèn fú

T7 resonance	T7 physical pendulum	T7 small-angle approximation
T7 simple pendulum	T7 torsion pendulum	

T7

小角度近似

xiǎo jiǎo dù jìn sì

T7

物理摆

wù lǐ bǎi

T7

共振

gòng zhèn

T7

扭摆

niǔ bǎi

T7

单摆

dān bǎi