Harold's High School Physics Cheat Sheet

13 October 2025

The 7 Base Units of Measure

Quantity Name	Symbol (Value)	Metric Units (SI)	Imperial Units (English)	
1. Length / Distance	w, x, y, z	meter (m)	foot (ft)	
2. Mass	m	kilogram (kg)	slug (or lb)	
3. Time	t		second (s)	
4. Temperature	T	Kelvin (K) Celsius (${}^{0}C$)	Fahrenheit (⁰ F)	
5. Electrical Current	i	Ampere (A)		
6. Amount of Substance	Μ, χ	mole (mol)	$1 \text{mol} \approx 6.02214076 \times 10^{23}$	
7. Luminous Intensity	lv	Candela (cd)		
Note : The 7 base units are mutually independent from each other.				

Note: The 7 base units are mutually independent from each other.
All other units of measurement can be derived from them.

Derived Units of Measure

Quantity Name	Symbol (Value)		Metric Units (SI)		l Units ish)
Length / Displacement	d, l, h, r, s	meter (m)	m	foot (ft)	ft
Area	A, SA		m^2		ft^2
Volume	V	liter (l)	m^3	fluid ounce (fl)	ft^3
Velocity / Speed	v,s		$\frac{m}{s}$		$\frac{ft}{s}$ $\frac{ft}{s^2}$
Acceleration	a, g		$\frac{m}{s^2}$		$\frac{ft}{s^2}$
Impulse	I		$N \cdot s \atop kg \cdot \frac{m}{s}$		$lb \cdot \frac{ft}{s}$
Linear Momentum	р		$kg \cdot \frac{m}{s}$		$lb \cdot \frac{ft}{s}$
Force	F	Newton (N)	$kg \cdot \frac{m}{s^2}$	pound (lb)	$slug \cdot \frac{ft}{s^2}$
Energy / Work / Heat	$E, W,$ $K ext{ or } KE,$ $U_g, U_s, U_E,$ Q	Joule (J)	$N \cdot m$ $C \cdot V$ $W \cdot s$ $kg \cdot \frac{m^2}{s^2}$	calorie (cal)	$ft\cdot lb$
Power	P	Watt (W)	$ \frac{J}{s} V \cdot A kg \cdot \frac{m^2}{s^3} $	horsepower (<i>hp</i>)	$ft \cdot \frac{lb}{s}$

Constants and Conversions

Constant Name	Symbol	Metric Units (SI)	Imperial Units (English)
		1.0 m	39.37 in 3.281 ft
		2.54 <i>cm</i>	1.0 in
Length	x	30.48 cm	1.0 ft
		1.61 km	1.0 mi
		1.0 km	0.621 mi
		1 km = 1,000 m	1 mi = 5,280 ft = 1,760 yd
		1.0~kg	2.205 <i>lb</i>
		0.454 <i>kg</i>	1.0 <i>lb</i>
Mass	m	1.0 <i>g</i>	0.035 <i>oz</i>
		14.594 <i>kg</i>	1 slug
		(standard gravity)	1 slug = 32.174 lb
Time	t	1 yr = 365.24 d	1 h = 60 min
	ľ	1 d = 24 h	1 min = 60 s
Acceleration			
Earth's Gravity	\boldsymbol{g}	$-9.81\frac{m}{s^2}$	$-32.2 \frac{ft}{s^2}$
Moon's Gravity (16.6% of Earth's)	g_m	$-1.625 \frac{m}{s^2}$	$-32.2\frac{ft}{s^2}$ $-5.35\frac{ft}{s^2}$
		0 °C	32 °F
Temperature	T	100 °C	212 °F
remperature	I	−17.8 °C	0 °F
		37.8 ℃	100 °F
Force	F	1.00 N	0.225 <i>lb</i>
FUICE	Г	4.45 N	1.00 <i>lb</i>
		3.785 <i>L</i>	1.0 gallon
Volume	V	1.0 <i>L</i>	1.057 quarts 0.264 gallons

How to Solve Physics Word Problems 6. **E**quations 1. Read 7. **S**olve 2. Diagram **Modified GUESS** 3. **G**ivens 8. **S**ubstitute Method 4. Observations 9. Double-Check 5. **U**nknowns Scenario

A marching band cadet marches on a football field. First, he marches 10 yards East, then 40 feet North. What is the shortest distance he must march to return to where he started?



#	Step	Example
Q	1. Carefully read the problem.	Reread the problem several times to
	Translate each word of each sentence into math.	make sure you did not miss anything.
	Draw a diagram . Clearly label everything.	c c b N
G	3. Write down the givens as variables with units. What information did they provide? Are any of them extraneous?	a = 10 yards East b = 40 feet North
③	Calculate observations or easily derived information. Don't forget unit conversions for consistency.	$10 \text{ yards} \times \left(\frac{3 \text{ feet}}{1 \text{ yard}}\right) = 30 \text{ feet}$
U	5. Write down the unknowns . What are they asking for?	The shortest distance is a straight line, or the hypotenuse. ' c '. $c = $ < units>
E	6. Recall relevant equations and formulas.	Since the path marched is a right triangle, we can use the Pythagorean Theorem: $a^2 + b^2 = c^2$
S	 Solve symbolically for the unknown variable. Reduce algebraically to the simplest form. Do not substitute until fully solved. 	$a^{2} + b^{2} = c^{2}$ $c = \sqrt{c^{2}} = \sqrt{a^{2} + b^{2}}$
S	8. Substitute the givens into the solved formula. Use a calculator as needed to calculate the answer.	$a = 30 \text{ feet}$ $b = 40 \text{ feet}$ $c = \sqrt{(30 \text{ feet})^2 + (40 \text{ feet})^2} = 50 \text{ feet}$
//	9. Double-check your work. Ask yourself if the answer is reasonable and makes sense. Don't forget the units. Box in your answer.	The shortest distance the cadet must march is 50 feet.

See also: **GUESS Method** for problem-solving.

Chapter 1: Let's Move! (Velocity)

Term	Equat	ion		Desci	ription	
	$\vec{x} = 10 \frac{m}{}$		antity that ind			
Vector Quantity	$x = 10 - \frac{1}{S}$	(e.g.	, magnitude a	nd directio	n)	
Scalar Quantity	b		antity that do			
Friction	F_{μ}	A fo	rce that resists	s motion w	hen two	bodies are in
	- μ	cont				
Inertia	1	The	tendency of a	body to re	sist chang	ges in its velocity.
Average Velocity	$v_{ave} = \frac{v_f}{v_{ave}}$	$\frac{\delta_t}{\Delta t}$ The	average of the	e velocity o	ver a give	en time interval.
Instantaneous Velocity	$v = \frac{\Delta}{\Delta}$	$\frac{x}{dt}$ The	velocity at a g	iven instan	t in time.	
Acceleration	$a = \frac{\Delta}{2}$	v	ange in an obj	ect's veloc	ity.	
	2	3 4	rhidadattan	6	7	8 9
Rulers	hundredth o	of an inch.				ort your answers to a
Units	g = -9.8	$31\frac{m}{s^2}$		•		ter the number. as the number.)
Significant Figures	2. A zero 3. A zero	_	t if it is betwe	en two sigr	nificant di	
Using SigFigs	 of the decimal point. When adding and subtracting measurements, you must report your answer to the same precision as the <u>least</u> precise number in the problem. When multiplying and dividing measurements, you must report your answer with the same number of significant figures as the measurement that has the <u>fewest</u> significant figures. There is always some <u>error</u> in the last significant figure of a measurement. 					
Precision vs. Accuracy	 Precision: The consistency and reproducibility of measurements (e.g., 10 decimal places). Accuracy: How close a measurement is to the <u>true</u> or accepted value. 					
Scientific Notation	14,000,000 = 1.4×10 ⁷ = 1.4E7					
Systematic Errors	"Science cannot prove anything." There is always a possibility that our experiments are wrong since they contain systematic errors.					
Unit Conversion			17 years	= <u>?</u> sec		
(Train Track Method)	17 yr	365.24 days	24 hours	60 min	60 sec	536,464,512 sec
incuiou _j		1 yr	1 day	1 hour	1 min	

		- ·				1
		Prefix	Abbreviation	Meaning	Scientific	
		giga	G	1,000,000,000	10 ⁹	-
		mega	M	1,000,000	10 ⁶	-
		kilo	k	1,000	10 ³	-
Prefixes		hector	Н	100	10 ²	
		deca	Da	10	10 ¹	-
		centi	С	0.01	10-2	
		milli	m	0.001	10-3	1
		micro	μ	0.00001	10 ⁻⁶	1
		nano	n	0.000000001	10 ⁻⁹	
Speed	$\varsigma = -$	$\frac{d}{dt}$	Speed (s) is a sca	lar quantity.		
Velocity	v = -	$\frac{\partial x}{\partial t}$	Velocity (v) is a v	ector quantity.		
Relative Velocity		$oldsymbol{v}_{rela}$	$u_{tive} = v_{moving_c}$	$p_{bject} - oldsymbol{v}_{reference}$	_object	
Unit Consistency				nits and make sure t units before you	-	
Newton's First Law of Motion (Law of Inertia)	An object will remain at rest, or in motion at a constant velocity (v or constant speed in a straight line), unless acted upon by a net external force (F).					
Velocity with Acceleration	 Equilibrium When acceleration and velocity are in the same direction (⇒), an object's speed increases. (↑) When acceleration and velocity are in opposite directions (⇄), an object's speed decreases. (↓) 					
Velocity Graph	STEADY STATIONARY STEADY STEADY FASTER RETURNING TO START					
Slope = Velocity	The slope of a position (x) versus time (t) graph is the velocity (v) .					

Chapter 2: Force and Acceleration

Term	Equation	Description
Newton's Second Law of Motion (Law of Acceleration)	is equal to the object's r	or, equivalently, the rate $\mathbf{F} \longrightarrow \mathbf{a}$
Free Fall		when the only force acting on it is the force due to
Air Resistance	3	resists motion through it.
Acceleration	$a = \frac{\Delta v}{\Delta t}$	A change in an object's velocity.
Acceleration Graph	8 6	zero acceleration constant velocity is elocity is velocity changing positive negative acceleration 1 2 3 4 5 6 7 8 9 10 Time in s
Slope = Acceleration	The slope of a velocity ((v) versus time (t) graph is the acceleration (a) .
Force	F = ma	Force (<i>F</i>) is any interaction that, when unopposed, changes the motion of an object.
Acceleration	$v = v_0 + at$	$a=rac{\Delta oldsymbol{v}}{\Delta t}=rac{oldsymbol{v}_f-oldsymbol{v}_0}{t}$
Velocity	$v^2 = v_0^2 + 2a \cdot \Delta x$	Derivation: Solve for t , set $t=t$, then simplify. $\frac{v_f+v_0}{2}=\frac{\Delta x}{t} \text{ and } v_f=v_0+at$
Position (Displacement)	$x = x_0 + v_0 t + \frac{1}{2} a t^2$ $\Delta x = v_0 t + \frac{1}{2} a t^2$ $J = \frac{\Delta a}{\Delta t}$	Displacement (Δx) is the area underneath a velocity versus time graph.
a is Constant	$J = rac{\Delta a}{\Delta t}$ (Jerk/Jolt)	These equations of motion apply only when the acceleration (a) is constant.
Gravity	(Jerk/Jolt) $g = -9.81 \frac{m}{s^2}$ $g = -32.2 \frac{ft}{s^2}$	The acceleration due to gravity (g) on the surface of the Earth is the same for all objects. It is negative $(-)$ since it is directed downwards (\downarrow) .
Weight vs. Mass	weight = mg	Weight is a force. Since $\mathbf{F}=m\mathbf{a}$, and \mathbf{a} on Earth is \mathbf{g} , then $weight=m\mathbf{g}$.

Chapter 3: Friction

Term	Equation		Desc	ription		
				force of A	on B	
Newton's Third Law of Motion	If object A exerts		F		- F	
(Law of Action and Reaction)	object B, then B w			A B	force of B on A	
	equal but opposit	e force on A.	Acti	ion – reactio	on	
Statio Friation (v.)	The frictional force	e between two				
Static Friction (μ_s)	relative to each o					
Kinetic Friction (μ_k)	The frictional force	e between two	o surfaces	that are <u>n</u>	noving relative	
u 1.7	to each other.			عمدنام سمان	/a = a +b = a = d	
Tension (T)	A force transmitte or chain) when it	_	ope or sim	mar object	(e.g., a trireau	
Streamlined Shape	A shape that redu	ices air resistai	nce.			
Wind Resistance	The faster an obje	ect moves thro	ugh the ai	ir, the stro	nger the air	
Terminal Velocity	resistance. The maximum vel	ocity (n) a	attained h	v a falling (phiect	
Terrimal velocity	The maximum ver	$ U_{max} $		y a railing (nal force)	bbject.	
				1	Motion	
		Force of	mm	FAR	oplied force	
		friction f				
Normal Force (N or F_n)	$\mathbf{F}_f = \mu \cdot \mathbf{F}_n$					
			<u> </u>			
			(Force	W = mg (Force of gravity)		
	1 8		(1 010	NCERT-Solutions.Guru		
	The coefficient of friction is unitless. It represents a percentage of					
	the normal force			•	percentage of	
	Static friction (μ_s)				tion (μ_k).	
		0 -	1			
		0 \(\)	$\mu \leq 1$			
Coefficient of Friction (μ)		A	Static	Kinetic		
coefficient of Thetion (µ)	IN THE RESERVE TO SERVE TO SER	/laterial	(μ_s)	(μ_k)		
	Z	ero friction	0	0		
		e or grease	0.15	0.03		
		aper	0.35	0.25		
	<u> </u>	Vood	0.5	0.4		
	1 //////	ubber 2	0.9 3	0.8	4	
	-		3		4	
	F _z =100 N	F _z =50 N	F ₂ =331/ ₃ N		F _z =25 N	
	-100 N	50	N	33½ N	25 N	
Block and Tackle	s=10 cm s=20	cm	s=30 cm	s=40 c		
(Pully System)			(
	F _i =100 N	F _L =100 N	F _L =100 N		F _i =100 N	
	1 - 700 14		1[-100]			
	h=10 cm	h=10 cm	h=10 cm		h=10 cm	

Chapter 4: Two-Dimensional Vectors

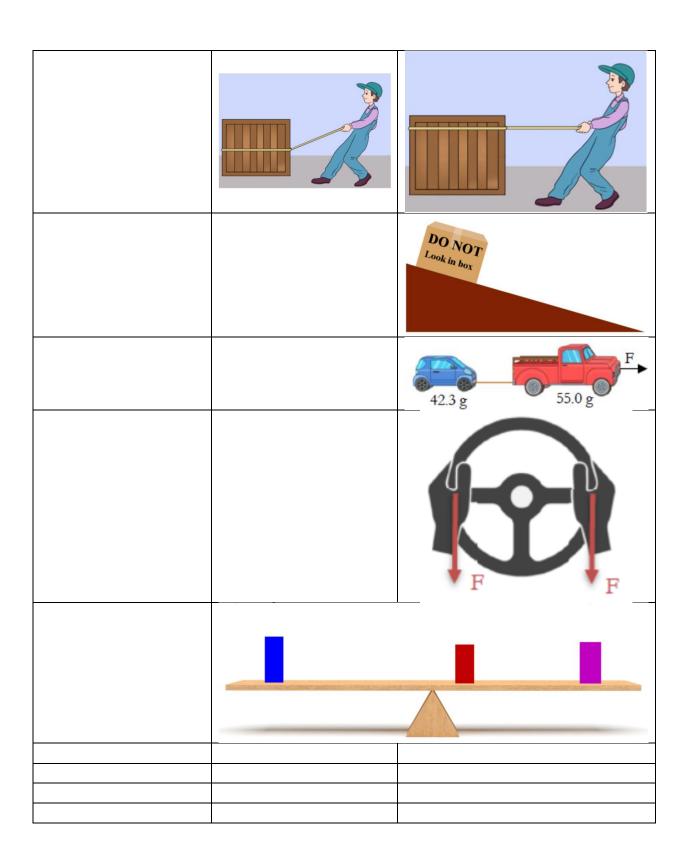
Term	Equation	Description		
Vector Anatomy	An arrow is used to represent a two-dimensional vector. The length of the arrow is the magnitude (a scalar quantity). And the counterclockwise angle from the positive x-axis is the direction. 3D arrow symbols: ⊙ out of page (+), ⊗ into the page (−).			
Vectors "Float"	Arrows representing vectors can be move and direction are not changed.	d freely, as long as their length		
Hypotenuse	The longest side of a right triangle.			
Trig Review	y r cos	$r \sin \theta$		
Converting Between Coordinate Systems	Polar \Rightarrow Rect. $r \angle \theta \Rightarrow (r, \theta)$ $x = r \cos \theta$ $y = r \sin \theta$ $\tan \theta = \left(\frac{y}{x}\right)$	Rect. \Rightarrow Polar $(r, \theta) \Rightarrow r \angle \theta$ $r^{2} = x^{2} + y^{2}$ $r = \sqrt{x^{2} + y^{2}}$ $\theta = tan^{-1} \left(\frac{y}{x}\right)$		
Vertical Component	$A_{y} = A \cdot \sin \theta$	$\mathbf{n}(\theta)$		
Horizontal Component	$A_{x} = A \cdot co$			
Angle	$\theta = \tan^{-1} \left(\right)$	$\frac{\overline{A_y}}{A_x}$		
Magnitude	$ A = \sqrt{A_x^2}$ $a^2 + b^2 =$	$+A_y^2$ c^2		
Vector Addition	When adding vectors ${\bf A}$ and ${\bf B}$ to get ${\bf C}$, $C_{\chi} = A_{\chi} + \\ C_{y} = A_{y} + \\ \\ b_{1} \\ a_{2} \\ b_{1} \\ a_{1} \\ a_{1} \\ b_{2} \\ b_{3} \\ b_{4} \\ a_{2} \\ b_{5} \\ a_{2} \\ b_{5} \\ a_{2} \\ b_{5} \\ a_{2} \\ b_{5} \\ a_{5} $	B_{x} B_{y} $(a_{1}+b_{1},a_{2}+b_{2})$		

Chapter 5: Two-Dimensional Motion

Term	Equation	Description				
Projectile	An object that has an initial velocity ($v_{ m g}$) gravity (g).	An object that has an initial velocity (v_0) but experiences only the force of gravity (g) .				
Parabolic Motion	Motion along a parabolic path, which is	s exhibited by projectiles.				
Dimensions	Two-dimensional (2D) situations can of $(2x 1D)$ situations. Time (t) spans all di	ften be analyzed as two one-dimensional mensions.				
Orthoganal	In two-dimensional (2D) motion, perpeoperate independently.	endicular (⊥) components of the motion				
Graph Orientation	The way we define the angle makes mo (or to the east) positive (+). These are the best definitions to use w equations.	otion up (↑) and motion to the right (→) with our one-dimensional (1D) motion				
Projectile Motion		$V = V = Y_0 + V_V t + \frac{1}{2}gt^2$ $V = V = V + V_V t + \frac{1}{2}gt^2$ $V = V + V_V t + \frac{1}{2}gt^2$				
	Horizontal (x-axis)	Vertical (y-axis)				
Position Equations	$\boldsymbol{x}(t) = x_0 + v_x t + \frac{1}{2} \boldsymbol{a}_x t^2$	$\mathbf{y}(t) = y_0 + v_y t - \frac{1}{2} \mathbf{g} t^2$				
Velocity Equations	$v_{x} = \boldsymbol{v}\cos(\theta)$	$v_y = \boldsymbol{v} \sin(\theta)$				
Range Equations	$range = x_{max} = \frac{v^2 \cdot \sin(2\theta)}{g}$	$height = y_{max} = y\left(\frac{t_{max}}{2}\right)$				
Air Resistance	Assume no air/wind resistance (drag). (If we factor in air/wind resistance, then differential calculus is needed.)	No air resistance θ_o With air resistance				

Chapter 6: Newton's Second Law and Two-Dimensional Motion

Term	Equation	Description		
Translational Equilibrium	The state in which the net force (F) acting on an object is equal to zero (0) .			
Static Translational	The state in which an object is	in translational equilibrium and is not		
Equilibrium	moving ($v = 0$).			
Dynamic Translational	The state in which an object is	in translational equilibrium and is		
Equilibrium	moving ($v \neq 0$).			
Accelerometer	A device that measures accele	eration (a) .		
Axis of Rotation	An imaginary line around which circles.	ch all points of a rotating body move in		
Lever Arm	The distance between the axis produce rotational motion.	s of rotation and the force used to		
Rotational Equilibrium	Force (F) causes changes in tr torque ($ au$) causes changes in r	·		
Tension	Tension (T) is a force.			
Gravity Components	On an incline whose angle (θ) is defined relative to the horizontal, the component of the force due to gravity: • Parallel to the incline is $m\mathbf{g} \cdot \sin(\theta)$. • Perpendicular to the incline is $m\mathbf{g} \cdot \cos(\theta)$. $\mathbf{F}_{\chi} = m\mathbf{g} \cdot \sin(\theta)$ $\mathbf{F}_{\gamma} = m\mathbf{g} \cdot \cos(\theta)$			
Coefficient of Friction	$\mu = \frac{\sin(\theta)}{\cos(\theta)} = \tan(\theta)$			
Torque	$ au = \mathbf{F}_{\perp} \cdot r$			
Rigid Bodies	$\sum \mathbf{F} = \sum m\mathbf{a} = 0$	$\sum \tau = \sum Fr = 0$		
		Exit		



Chapter 7: Uniform Circular Motion and Gravity

Term	Equation	Description			
Centripetal Force	A force directed to the center of a circle	e.			
Period (T)	The time it takes to complete one full o	cycle.			
Frequency (f)	The number of cycles that can be completed every second.				
Gravity (g)	The acceleration of the attractive force that have mass.	that exists between all physical objects			
Satellite	A body that orbits another body.				
Frequency	$f = \frac{1}{T}$ Units: Hertz (Hz)	1			
Speed	$v = \frac{2\pi r}{T}$ Units: $\frac{m}{s}$				
Centripetal Force	$F_c = \frac{mv^2}{r}$ Units: Newtons (N)	Object Centripetal force Radius			
Centripetal Acceleration	$a_c = \frac{v^2}{r}$ Units: $\frac{m}{s^2}$	v a_{c} a_{c} a_{c} v			
Gravitational Force	$\boldsymbol{F_g} = \frac{Gm_1m_2}{r^2}$	F_1 F_2 m_2			
Gravitational Constant (<i>G</i>)	$G = 6.67 \times 10^{-11} \frac{Nm^2}{kg^2}$				

	1. Orbits : All planets move in elliptical orbits, with the sun at one focal point. $\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1$	Aphelion Sun Perihelion
Kepler's Laws (of planetary motion)	2. Areas : A line that connects a planet to the sun sweeps out equal areas in equal time intervals. $A_1 = A_2$	Slower Faster
	3. Periods : The square of a planet's period is proportional to the cube of its orbit's semi-major axis. $T^2 \propto a^3$	Sun $b^2 = a^2(1 - e^2)$

Chapter 8: Energy

Term	Equation	Description
Energy	Е	The ability to do work.
Work	W = Fd	The magnitude of an object's displacement times the parallel component of the applied force.
WOIR	$W = F_{\parallel} \cdot \Delta x$	When a body does work, it loses energy. When a body is worked on, it gains energy.
Potential Energy (PE)	PE = mgh	Energy that is stored but not currently doing work. Potential energy is relative , so it must be defined relative to a reference point.
Kinetic Energy (KE)	$KE = \frac{1}{2}mv^2$	Energy in the form of motion.
Total Energy (TE)	TE = PE + KE	$+W_f = constant$
Total Energy (TE)	$E = U_g + K + 1$	$W_f + Q = constant$
The First Law of Thermodynamics	Energy (E) cannot be created or destroyed. It can only change forms.	
Power	$P = \frac{\Delta W}{\Delta t}$ $P = Fv$	The amount of energy converted or transferred per unit time.
Units	E W PE KE TE	Joules (J) $(kg \cdot m^2/s^2)$
	P	Watt (<i>W</i>) (<i>J/s</i>)

Chapter 9: Momentum and Its Conservation

Equation	Description
	Equation

Chapter 10: Periodic Motion

Term	Equation	Description
Periodic Motion		
Hooke's Law		
Amplitude		
Simple Harmonic Motion		
Damped Harmonic Motion		
		25
		2.5
		2.0
		2 1.5
		Q 1.5 2 1.0
		Š 1.0
		0.5
		•
		0.0
		0.0000 0.0200 0.0400 0.0600 0.0800 Length (m)
		2009 (10)

Chapter 11: Sound and Light

Term	Equation	Description
Oscillations		
Transverse Wave		
Wavelength		
Longitudinal Wave		
Doppler Effect		
Sonic Waves		
Ultrasonic Waves		
Infrasonic Waves		
Timbre		
Wave-Particle Duality		

Chapter 12: Optics

Term	Equation	Descr	iption
Law of Reflection			
Virtual Image			
Real Image			
Refraction			
Spherical Aberration			
Chromatic Aberration			
		Medium	Index of
			Refraction
		air	1.0003
		water	1.333
		ethanol	1.361
		ice	1.309
		glass, crown	1.52
		glass, flint	1.66
		fused quartz	1.458
		diamond	2.419
			•

Chapter 13: The Electrostatic Force

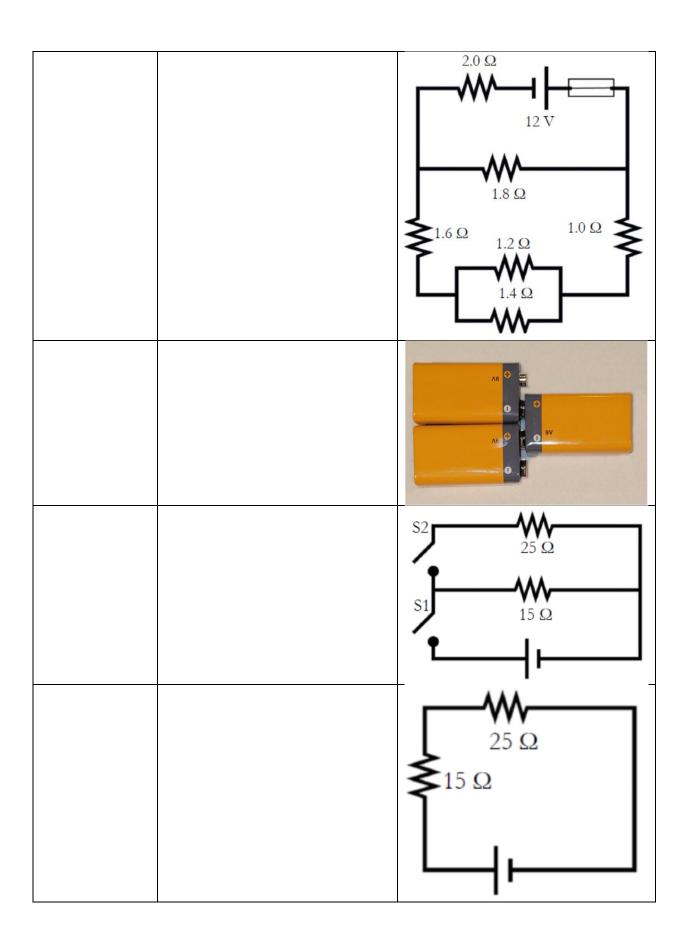
Term	Equation	Description
Electrostatic Force		
Triboelectric Charging		
Charging by Conduction		
Charging by Induction		
Conductor		
Insulator		
		12 cm 12 cm -12.5 mC -15.0 mC 45.0 mC
		-15.0 mC
		12 12
		12 cm 12 cm
		12 cm 12 cm
		-12.5 mC 12 cm 45.0 mC

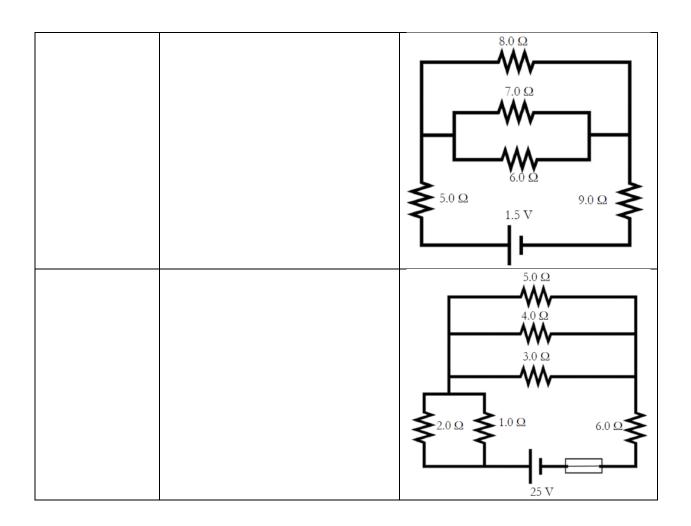
Chapter 14: Electricity Has Potential!

Term	Equation	Description
Electric Potential		
Electron Volt		
Capacitor		
Capacitance		
Electric Permittivity (ϵ)		
Ground (Electrical)		
Law of Charge Conservation		
Electric Current		
Electric Circuit		
		conventional current electron flow

Chapter 15: Electric Circuits

Term	Equation	Description
Drift Velocity		
		1 ***
Resistor		- ***-
Battery		
(Voltage source)		7 -
Fuse		
Capacitor		4
Switch		•
		S1 R1 R2 R2
		$\begin{array}{c c} A: & & & B: \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$
		R_3 R_2 R_4 R_3 R_2 R_4 R_5 R_6





Chapter 16: Magnetism

Term	Equation	Description
Basic Law of Magnetism		
Magnetic Permeability (μ)		
Right-Hand Rule		
Diamagnetic Substance		
Paramagnetic Substance		
Ferromagnetic Substance		
Faraday's Law of Magnetic		
Induction		
Electromotive Force		
Alternating Current		
Direct Current		
Rectifier		
Inverter		
Lenz's Law		

Sources

These chapters and content are from the textbook:

• Dr. Jay L. Wile (2023). <u>Discovering Design with Physics</u>, 1st Edition.