

Conversions - Equivalent Measures {can swap one for another without a loss in accuracy for ex. 1' is exactly 12" }

Metric Prefixes: Giga -x-x- Mega -x-x -Kilo - Hecto - Dekka - _{m, L, g} - deci - centi - milli -x-x - micro - x-x - nano

Order {T.x.x.G.x.x.M.x.x.K. H. D. or da. base. d. c. m. x.x.mc. or μ. x.x. n.x.x. p.x.x. f.x.x.} [x. = unnamed space]

L=liter **Volume** 1liter = **1L** = 1000 milliliters = 1000mL = 1,000,000mcL
 1 milliliter = **1mL** = **1cc** = 1cubic centimeter = 1cm³ {poor abbreviation}
 g= gram **Weight** 1 kilogram = 1Kg = 1000g = 1000grams 1t = 1tonne = 1000Kg
 1 gram = 1g = 1G {poor abbreviation} = 1000mg = 1000milligrams = 1,000,000mcg

{m = minim on the computer not meter}

m= meter **Length** 1 meter = 1m = 100 centimeters = 100cm = 1000millimeters = 1000mm
 m² = square meter **Area** 1 m² = 10,000c m² 1cm² = 100mm² 1Km = 1,000m

Apothecary **Volume** 1 fluid ounce = **3**1 = 1 floz = 8 drams = **3**8 = 8 dr

fluid ounce = **3**= fl oz dram = **3** = dr 1 fluid dram = **3**1 = dr 1 = 60 minims = **60**

Household **Volume** 1 gallon = 2 half-gallons = 4 quarts = 8 pints = 16 cups = 128 fluid ounces

gal = gallon qt = quart 1 quart = 1qt = 2 pt = 4c = 32floz

pt= pint c =cup 1 pint = 1 pt = 2c = **3**16

1 cup = 1c = 8oz = 1 glass = 1 gl = 8 fluid ounces = **3**8 1 teacup = 6oz

T =tablespoon = tbs 1 measuring cup = 1c = 8 fluid ounces = **3**8 = 16T = 48t

t = teaspoon = tsp 1 fluid ounce = **3**1 = 2 Tablespoons = 2 T= 6 teaspoons = 6t

gtt = drops mcgtt = microdrop 1 tablespoon = 1Tbsp = 1Tbs = 1T = 3 teaspoons = 3 tsp = 3t

1 teaspoon = 1t = 60 drops = 60gtts = 60mcgtt {name so **poor abbreviation**}

lb = pound = #1 **Weight** 1 pound = 1lb = #1 = 16 ounces = 16 oz

oz = ounce 1T = 1 ton(short) = 2000lb~40 cuft {standard ton} 1 ton(long) = 2240 lb~42cuft

Length 1 mile = 1mi = 1760 yd = 5280 ft

yd = yard 1 yard = 1 yd = 3 ft = 3' = 36 inches = 36"

ft = feet = ' 1 foot = 1 ft = 1' = 12 inches = 12"

in = inch = '' **Area** 144sqin = 1 sqft 9sqft = 1 sqyd 1 acre = 4,840 sqyd

Time 1year = 1yr = 12 months = 12mo = 365days = 365d 1h = 1° = 60min=60' 1min = 60sec

Other 1 milli-equivalent = 1 mEq 1 unit = 1U = 1u = 1000milliunits = 1000mU = 1000mlu {poor abbreviation}

Approximate Measures Among Systems - read across the line ~ means approximately {Not quite equal}

	<u>Metric</u>	<u>Household</u>	<u>Apothecary</u>
<u>Volume</u>	1 Liter	~1 quart	= 32 fluid ounces
	500 mL	~ 1 pint	= 16 fluid ounces
	240 - 250 mL	~ 1 cup = 16T	= 8 fluid ounces
	30 - 32 mL	~ 2 tablespoons	~ 1 fluid ounce
	15 - 16 mL	~ 1 tablespoon	~ 4 drams
	5 mL	~ 1 teaspoon= 60gtt.	~ 1 fluid dram= 60
	5 mL	= 60 drops.	~ 60 ~ 1 dram
	4mL	= 60 = 1 dram
	1mL	~ 15 - 16 gtt	~ 15 - 16 minims
		1 drop = 1 gtt	~ 1 minim = 60 = 1m {on computer only}
<u>Weight</u>	1 kilogram	~ 2.2 pounds {* computer}	
	0.45 kg	~ 1 pound {not good enough}	
	1 gram = 1000 mg	~ 15 grain
	60 - 65 mg	~ 1 grain = gr1
	1tonne metric ton	2204.6lbs=1.1023tons	
<u>Length</u>	2.5 -2.54 cm	~ 1 inch	
	1.6 Km	~ 1 mi	
	1m	~3.3ft ~ 1.1yd	
	1 km	~ 0.62mi	
<u>Temperature</u>	°C = (f-32)/1.8 {f-32= then divide by 1.8}		°F = 1.8c + 32 {c×by 1.8 then +32}
<u>Area</u>	1m ²	~1.2sq. yd	
	1hectacre = 100 ² m ² = 10000m ² ~ 2.47 acres		BSA = $\sqrt{\frac{Lb \times in}{3131}} = \sqrt{\frac{Kg \times cm}{3600}}$ {√Lb × in / 3131 =}

Drug Administration Abbreviations — Dimensional Analysis Reference Tables

\bar{a}	a on the computer	before	ft '	foot	NKDA	no known drug allergies	qs	every shift
$\bar{a} \bar{a}$		of each	g tube, ngt	nasal gastric tube	NPO	nothing by mouth	qt	quart
ac; a.c.		before meals	g; G; \bar{g}	gram	noc, noct	nocturnal	RoF	rate of flow
ad		up to	gal	gallon	nonrep	do not repeat	R/O	rule out
AD		right ear	gr	grain	NS; N/S, NSS	normal saline	R	rectal , or respiration
ad lib		freely, as desired	ggt; gtts	drop; drops	NSAID	nonsteroidal anti-inflammatory drug	rep	repeat
AM, am	in the morning, \bar{a}	noon	h; hr; H; °	hour			R_x	treatment; Prescription
amp		ampule	HCl	Hydrochloride	$\acute{o}d$, daily	once or every day	$\frac{s}{s}$	s on the computer without
aq; aq sol		aqueous solution	hs; \emptyset N (hour of sleep); at bedtime		OD	right eye	$\frac{s}{s}$ s; ss	½, one half, <u>half</u>
AS		left ear	ss; I: V: X	½, one, five, ten	os	mouth	SL; sl; sL	sublingual
AtSO ₄	Atropine Sulfate		IC	intracardia	OS	left eye	soln; sol	solution
AU		both ears	ID	intra dermal	OU	both eyes	s.o.s.	<i>as necessary</i>
alt h		alternate hours	IM	intramuscular	OTC	over the counter	stat	immediately
bi		two	IN	intra nasal	oz; \bar{z}	ounce	SQ; subq; sc	subcutaneous
bid; BID		twice a day	in; "	inch	\bar{p} p on the computer	post, after	SR, CR	sustained release
BIW		twice a week	iss	1½, one and a half	P	pulse	S&S	Swish & Swallow
BP		Blood Pressure	IV	4, intravenous	pc; p.c.	after meals	S/S	Signs & Symptoms
BSA; bsa		body surface area	IVP	intravenous push, bolus	PCA	patient-controlled analgesia	supp	suppository
\bar{c} ,	c on the computer	with	IVPB	intravenous piggyback	PICC: picc	peripherally	susp	suspension
c		cup	IVSS	intravenous soluset		inserted central catheter	syp; syr	syrup
C; °C		degree Celsius; centigrade	inj	injection	per, p, /	÷ or by	T; °T	temperature
cap, cap(s); CAP;		capsule(s)	Kg; kg	kilogram	po; (per os)	by mouth, oral	T; tbs; tbs;	tablespoon
comp		compound	KVO; kvo	keep vein open	PO	physicians order	tab; tabs	tablet, tablets
cm		centimeter	L; l	liter	pr, rect	by rectum	TD	transdermal patch
cc; cm ³		cubic centimeter	LA, SR, CR	long acting	PM; pm	afternoon, evening	tid; TID	three times a day
CVP		central venous pressure	LIB	left in bag; left in bottle	postop; post-op	after surgery	tiw	three times a week
d		day	lb; #	pound	preop pre-op	before surgery	TPN	total parenteral nutrition
DBS		diminished breath sounds	liq	liquid	prn	when necessary, as needed	tr; tinct	tincture
dil		dilute	m ; M	meter	Pt; PT	patient	TO	telephone order
d/c; DC		discharged, discontinue	mm	millimeter	pt	pint	TKO	to keep open
dist		distilled	m ²	square meter	q	each, every	t; tsp	teaspoon
dr; fl dr; \bar{z}		fluid dram	mj; \bar{m} , m on the computer	minim	qam; QAM	every morning	U, IU, Unit	international unit
D/W		dextrose in water	MAR	medical admin. record	$\acute{q}d$, $\acute{o}d$	once a day, daily	ung; oint	ointment
D5W, D ₅ W5%		dextrose in water	μ ; mc	mu <i>Greek for micro</i>	qh; q1h	once an hour	VO	verbal order
D ₁₀ W		10% dextrose in water	mcgtt; μ gtt	microdrop	qoh	every other hour	VS	vital signs
D _x		diagnosis	mcg; μ g	microgram	q6h; QID	every 6 hours	wt; W	weight
EC		enteric coated	min; MIN; m; '	minute	q8h; TID	every 8 hours	XR, ER	extended release
elix; ELIX		elixir	mg; mG	milligram	q12h; BID	every 12 hours	yd; y	yard
et		and	mL; ml	milliliter	qhs	every night at bed time	>	greater than
ext		extract	mU	milliunit	qid; QID	four times a day	<	less than
fl; FL; Fl; fld		fluid	mEq	milliequivalent	$\acute{q}d$	every other day	/	per
fl oz, \bar{z}		fluid ounce	n; noct	night	qn	every night	~; \approx	approximate
F; °F		degree Fahrenheit	NG	nasogastric	qs	quantity sufficient/ as much as needed, enough	†, ‡, Δ, ±, Σ	Use words

Temperature Equivalents

•To convert °C to °F:
multiply by 1.8 and then add 32.

•To convert °F to °C:
subtract 32 and then divide by 1.8.

°C	to	°F:
34°		93.2°
35°		95°
36°		96.8°
37°		98.6°
38°		100.4°
39°		102.2°
40°		104°
41°		105.8°
42°		107.6°

Weight Equivalents

•To convert kg to lb: multiply by 2.2 lb = 1kg
•To convert lb to kg: multiply by 0.45 kg = 1lb

lb	kg	lb	kg
15	6.8	100	45.5
20	9.1	120	54.5
30	13.6	130	59.1
35	15.9	140	63.6
40	18.2	150	68.2
45	20.5	160	72.7
50	22.7	170	77.3
60	27.3	180	81.8
70	31.8	190	86.4
80	36.4	200	90.9
90	40.9	210	95.5

Weight Equivalents

•To convert gr to mg: mult. by 1gr = 60mg
•To convert g to gr: multiply by 1g = 15gr

gr to g or mg	gr to mg
gr15	1g = 1000mg
gr10	600(650)mg
gr7½	500mg
gr5	300(325)mg
gr4	250mg
gr3	200mg
gr1½	100mg
gr1	60(65)mg
gr½	30mg
gr⅓	20mg
gr¼	15mg
gr 1/10	6mg
gr 1/20	3mg
gr 1/30	2mg
gr 1/60	1mg
gr 1/100	0.6mg
gr 1/120	0.5mg
gr 1/200	0.3mg
gr 1/250	0.25mg
gr 1/400	0.15mg
gr 1/500	0.12mg
gr 1/600	0.1mg