

<b>WEIGHT – Basic unit is gram (g)</b>				
	<b>Grams</b>	<b>Grains</b>	<b>Ounces</b>	<b>Pounds</b>
Milligram (mg)	0.001	0.01543	----	----
Centigram (cg)	0.01	0.1543	----	----
Decigram (dg)	0.1	1.543	----	----
Gram	1	15.43	0.03527	----
Decagram (dkg)	10	154.3	0.3527	----
Hectogram (hg)	100	1543	3.527	0.22046
Kilogram (kg)	1,000	----	35.27	2.2046
Quintal (q)	100,000	----	3527	220.46
Metric Ton (MT)	1,000,000	----	----	2204.6

**To convert**

<b>Grains to Centigrams</b>	multiply by 6.48	<b>Grams to Ounces</b>	multiply by .03527
<b>Centigrams to grains</b>	multiply by .1543	<b>Pounds to Kilograms</b>	multiply by .4536
<b>Ounces to Grams</b>	multiply by 28.35	<b>Kilograms to Pounds</b>	multiply by 2.2046
<b>Tons to Metric Tons</b>	multiply by .9078	<b>Metric Tons to Tons</b>	multiply by 1.1023 (2,000)

<b>CAPACITY – Basic unit is liter (l)</b>							
<b>Metric Unit</b>	<b>Cubic Capacity</b>			<b>Liquid Capacity</b>			
	<b>Liters</b>	<b>Cu.IN.</b>	<b>Cu.Ft.</b>	<b>Fl. Ozs.</b>	<b>Pints</b>	<b>Quarts</b>	<b>Gallons</b>
<b>Millileter (ml)</b>	0.001	0.06102	----	0.03382	----	----	----
<b>Centileter (cl)</b>	0.01	0.61023	----	0.33815	----	----	----
<b>Deciliter (dl)</b>	0.1	6.1023	----	3.3815	0.2113	0.1057	----
<b>Liter (l)</b>	1	61.023	0.0353	33.815	2.113	1.057	0.264
<b>Decaliter (dcl)</b>	10	610.23	0.3531	338.15	21.13	10.57	2.64
<b>Hectoliter (hl)</b>	100	6102.3	3.531	3381.5	211.3	105.7	26.4
<b>Kiloliter (kl)</b>	1000	61023	35.31	33815	2113	1057	264

**To convert**

<b>Cu. In. to Centiliter</b>	multiply by 1.639	<b>Pints to Liters</b>	multiply by .4732
<b>Centiliter to Cu. In.</b>	multiply by .61023	<b>Liters to Pints</b>	multiply by 2.113
<b>Cu. Ft. to Liter</b>	multiply by 28.32	<b>Quarts to Liters</b>	multiply by .9463
<b>Liter to Cu. Ft.</b>	multiply by .0353	<b>Liters to Quarts</b>	multiply by 1.057
<b>Fl. Oz to Centiliter</b>	multiply by 2.957	<b>Gallons to Liters</b>	multiply by 3.785
<b>Centiliter to Fl. Oz.</b>	multiply .33815	<b>Liters to Gallons</b>	multiply by .2642

<b>FORCE/STRESS – Basic unit is pascal (Pa) commonly expressed in mega pascals (Mpa)</b>	
Note: 1,000,000 Pa = 1 Mpa	
1 pascal = Newton per square meter	1 pound force (lbf) = 4.448222 newton (N)
1 pound force per square foot (lbf/ft <sup>2</sup> ) = 47.88026 pascal (Pa)	
1 kilogram force (kgf) = 9.806650	1 pound per square inch (psi) = .006894757 mega pascals (Mpa)

**To convert**

<b>Psi to Mpa</b>	multiply by 0.006894757	<b>Mpa to lbf/in<sub>2</sub></b>	multiply by 145.0377
<b>Ksi to Mpa</b>	multiply by 6.894757	<b>kgf/mm<sub>2</sub> to Mpa</b>	multiply by 9.80665
<b>Mpa to psi</b>	multiply by 145.0377	<b>Mpa to kgf/mm<sub>2</sub></b>	multiply by 0.1019716
<b>Mpa to ksi</b>	multiply by 0.1450377	<b>N/mm<sub>2</sub> to Mpa</b>	multiply by 1.000000
<b>Lbf/in<sub>2</sub> to Mpa</b>	multiply by 0.006894757	<b>Mpa to N/mm<sub>2</sub></b>	multiply by 1.000000

<b>LENGTH– Basic unit is meter (m)</b>					
Metric Unit	Meters	Inches	Feet	Yards	Miles
Millimeter (mm)	0.001	----	----	----	----
Centimeter (cm)	0.01	0.3937	----	----	----
Decimeter (dm)	0.1	3.937	0.3281	0.1094	----
Meter (m)	1	39.37	3.281	1.094	----
Decameter (dkm)	10	393.7	32.81	10.94	----
Hectometer (hm)	100	3937	328.1	109.4	----
Kilometer (km)	1000	----	3281	1094	0.6214

**To convert**

<b>Inches to Millimeters</b>	multiply by 25.4	<b>Yards to Meters</b>	multiply by .9144
<b>Millimeters to Inches</b>	multiply by .03937	<b>Meters to Yards</b>	multiply by 1.094
<b>Feet to Meters</b>	multiply by .3048	<b>Miles to Kilometers</b>	multiply by 1.609
<b>Meters to Feet</b>	multiply by 3.281	<b>Kilometers to Miles</b>	multiply by .6214

<b>AREA – Basic unit is centare (ca) which is 1 square meter</b>					
Metric Unit	Centares	Sq. Inches	Sq. Feet	Sq. Yards	Acres
Sq. Millimeter (sq.mm.)	0.000001	----	----	----	----
Sq. Centimeter (sq.cm.)	0.0001	0.1550	----	----	----
Sq. Decimeter (sq.dm.)	0.01	15.50	0.1076	----	----
Centare/Sq. Meter (ca/sq.m)	1	1550	10.76	1.196	----
Acre (a)	100	----	1076	119.6	----
Hectare (ha)	10,000	----	----	----	2.417
Sq. Kilometer (sq.km)	1,000,000	----	----	----	247.1

**To convert**

<b>Sq. In. to Sq. cm.</b>	multiply by 6.452	<b>Acres to Hectares</b>	multiply by .4047
<b>Sq. Cm. to Sq. In.</b>	multiply by .1550	<b>Hectares to Acres</b>	multiply by 2.471
<b>Sq. Ft. to Sq. m.</b>	multiply by .0929	<b>Acres to Sq. km.</b>	multiply by .004047
<b>Sq. M. to Sq. Ft.</b>	multiply by 10.76	<b>Sq. km. to Acres</b>	multiply by 247.1
<b>Sq. Yds. To Sq. m.</b>	multiply by .8361	<b>Sq. Miles to Sq. km.</b>	multiply by 2.590
<b>Sq. m to Sq yds.</b>	multiply by 1.196	<b>Sq. km. to Sq. Miles</b>	multiply by .3861

<b>VOLUME – Basic unit is stere (s) which is 1 cubic meter</b>				
Metric Unit	Steres	Cubic Inch	Cubic Foot	Cubic Yards
Cum Millimeters (cu mm)	0.000000001	----	----	----
Cu. Centimeters (cu cm)	0.000001	0.06102	----	----
Cu. Decimeters (cu dm)	0.001	61.023	----	----
Decimeter (ds)	0.1	6102.3	3.531	0.1308
Stere/Cu. Meter (s/cu m)	1	61023	35.31	1.308
Decastere (dks)	10	----	353.1	13.08

**To convert**

<b>Cu. In to Cu. Mm.</b>	multiply by 1639	<b>Cu. Ft. to Cu. M.</b>	multiply by .0283
<b>Cu. Mm. to Cu. In.</b>	multiply by .000061	<b>Cu. M. to Cu. Ft.</b>	multiply by 35.31
<b>Cu. In. to Cu. Cm.</b>	multiply by 16.39	<b>Cu. Yds. to Cu. M.</b>	multiply by .7646
<b>Cu. Cm to Cu. In.</b>	multiply by .06102	<b>Cu. M. to Cu. Yds.</b>	multiply by 1.308