

METRIC SYSTEM

LENGTH — Basic unit is meter (m)

Metric Unit	Meters	Inches	Feet	Yards	Miles
Millimeter (mm)	.001	—	—	—	—
Centimeter (cm)	.01	.3937	—	—	—
Decimeter (dm)	.1	3.937	.3281	.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	.6214

To convert

In. to Millimeters — multiply by 25.4
 Millimeters to In. — multiply by .03937
 Feet to Meters — multiply by .3048
 Meters to Feet — multiply by 3.281

Yards to Meters — multiply by .9144
 Meters to Yards — multiply by 1.094
 Miles to Kilometers — multiply by 1.609
 Kilometers to Miles — multiply by .6214

AREA — Basic unit is centare (ca) which is 1 square meter

Metric Unit	Centares	Square Inches	Square Feet	Square Yards	Acres
Sq. Millimeter (sq. mm)	.000001	—	—	—	—
Sq. Centimeter (sq. cm)	.0001	.1550	—	—	—
Sq. Decimeter (sq. dm)	.01	15.50	.1076	—	—
Centare/Sq. Meter (ca/sq. m)	1	1550	10.76	1.196	—
Acre (a) 100	—	1076	119.6	—	—
Hectare (ha)	10,000	—	—	—	2.471
Sq. Kilometer (sq. km)	1,000,000	—	—	—	247.1

To convert

Sq. in. to Sq. cm — multiply by 6.452
 Sq. cm to Sq. in. — multiply by .1550
 Sq. Ft. to Sq. m. — multiply by .0929
 Sq. m. to Sq. Ft. — multiply by 10.76
 Sq. Yds. to Sq. m. — multiply by .8361
 Sq. m. to Sq. Yds. — multiply by 1.196

Acres to Hectares — multiply by .4047
 Hectares to Acres — multiply by 2.471
 Acres to Sq. km. — multiply by .004047
 Sq. km. to Acres — multiply by 247.1
 Sq. Miles to Sq. km. — multiply by 2.590
 Sq. km. to Sq. Miles — multiply by .3861

VOLUME — Basic unit is stere (s) which is 1 cubic meter

Metric Unit	Steres	Cubic Inch	Cubic Foot	Cubic Yards
Cu. Millimeter (cu. mm)	.000000001	—	—	—
Cu. Centimeter (cu. cm)	.000001	.06102	—	—
Cu. Decimeter (cu. dm)	.001	61.023	—	—
Decistere (ds)	.1	6102.3	3.531	1.308
Stere/Cu. Meter (s/cu. m)	1	61023	35.31	1.308
Decastere (dks)	10	—	353.1	13.08

To convert

Cu. In. to Cu. mm — multiply by 16.39
 Cu. mm to Cu. In. — multiply by .000061
 Cu. In. to Cu. cm — multiply by 16.39
 Cu. cm to Cu. In. — multiply by .06102

Cu. Ft. to Cu. m — multiply by .0283
 Cu. m to Cu. Ft. — multiply by 35.31
 Cu. Yds. to Cu. m — multiply by .7646
 Cu. m to Cu. Yds. — multiply by 1.308

WEIGHT — Basic unit is gram (g)

Metric Unit	Grams	Grains	Ounces	Pounds
Milligram (mg)	.001	0.1543	—	—
Centigram (cg)	.01	1.543	—	—
Decigram (dg)	.1	1.543	—	—
Gram	1	15.43	.03527	—
Decagram (dkg)	10	154.3	.3527	—
Hectogram (hg)	100	1543	3.527	.22046
Kilogram (kg)	1000	—	35.27	2.2046
Quintal (q)	100,000	—	3527	220.46
Metric Ton (MT)	1,000,000	—	—	2204.6

To convert

Grains to Centigrams — multiply by 6.48
 Centigrams to Grains — multiply by .1543
 Ounces to Grams — multiply by 28.35

Grams to Ounces — multiply by .03527
 Pounds to Kilograms — multiply by .4536
 Kilograms to Pounds — multiply by 2.2046

Tons (2000 #) to Metric Tons — multiply by .9078
 Metric Tons to Tons (2000 #) — multiply by 1.1023

(Continued)