

## METRIC CONVERSION TABLE

The principal units are the meter for length, the liter for capacity and the gram for weight. The following prefixes are used for sub-divisions and multiples: milli = 1/1000; centi = 1/100; deci = 1/10; deca = 10; hecto = 100; kilo = 1000.

### MEASURES OF LENGTH

10 millimetters (mm.)	= centimeter (cm.)
10 centimeters	= 1 decimeter (dm.)
10 decimeters	= 1 meter (m.)
1000 meters	= 1 kilometer (km.)

### MEASURES OF WEIGHT

10 milligrams (mg.)	= 1 centigram (cg.)
10 centigrams	= 1 decigram (dg.)
10 decigrams	= 1 gram (g.)
10 grams	= 1 decagram (Dg.)
10 decagrams	= 1 hectogram (Hg.)
10 hectograms	= 1 kilogram (Kg.)
1000 kilograms	= 1 (metric) ton (T.)

### LENGTH CONVERSION CONSTANTS FOR METRIC AND U.S. UNITS

Millimeters × .039370	= inches.
Meters × 39.370	= inches.
Meters × 3.2808	= feet.
Meters × 1.09361	= yards.
Kilometers × 3.2808	= feet.
Kilometers × .62137	= Statute Miles.
Kilometers × .53959	= Nautical Miles.

### SURVEYOR'S SQUARE MEASURE

100 square meters (m. <sup>2</sup> )	= 1 are (ar.)
100 acres	= 1 hectare (har.)
100 hectares	= 1 sq. kilometer (Km. <sup>2</sup> )

### SQUARE MEASURE

100 sq. millimeters (mm. <sup>2</sup> )	= 1 sq. centimeter (cm. <sup>2</sup> )
100 sq. centimeters	= 1 sq. decimeter (dm. <sup>2</sup> )
100 sq. decimeters	= 1 sq. meter (m. <sup>2</sup> )

### CUBIC MEASURE

1000 cu. millimeters (mm. <sup>3</sup> )	= 1 cu. centimeter (cm. <sup>3</sup> )
1000 cu. centimeters	= 1 cu. decimeter (dm. <sup>3</sup> )
1000 cu. decimeters	= 1 cu. meter (m. <sup>3</sup> )

### DRY AND LIQUID MEASURE

10 milliliters (ml.)	= 1 centiliter (cl.)
10 centiliters	= 1 deciliter (dl.)
10 deciliters	= 1 liter (l.)
100 liters	= 1 hectoliter (hl.)
1 liter	= 1 cubic decimeter = the volume of 1 kilogram of pure water at a temperature of 39.2 degrees F.

### WEIGHT CONVERSION CONSTANTS FOR METRIC AND U.S. UNITS

Grams × 981	= dynes.
Grams × 15.432	= grains.
Grams × .03527	= ounces (Avd.).
Grams × .033818	= fluid ounces (water).
Kilograms × 35.27	= ounces (Avd.).
Kilograms × 2.20462	= pounds (Avd.).
Metric Tons (1000 Kg.) × 1.10231	= Net Ton (2000 lbs.).
Metric Tons (1000 Kg.) × .98421	= Gross Ton (2240 lbs.)
	Gross Ton (2240 lbs.)

### AREA CONVERSION CONSTANTS FOR METRIC AND U.S. UNITS

Square Millimeters × .00155	= square inches.
Square Centimeters × .155	= square inches.
Square Meters × 10.76387	= square feet.
Square Meters × 1.19599	= square yards.
Hectares × 2.47104	= acres.
Square Kilometers × 247.104	= acres.
Square Kilometers × .3861	= square miles.

Square Inches × 645.163	= square millimeters.
Square Inches × 6.45163	= square centimeters.
Square Feet × .0929	= square meters.
Square Yards × .83613	= square meters.
Acres × .40469	= hectares.
Acres × .0040469	= square kilometers.
Square Miles × 2.5899	= square kilometers.

### VOLUME CONVERSION CONSTANTS FOR METRIC AND U.S. UNITS

Cubic Centimeters × .033818	= fluid ounces.
Cubic Centimeters × .061023	= cubic inches.
Cubic Centimeters × .271	= fluid drams.
Liters × 61.023	= cubic inches.
Liters × 1.05668	= quarts.
Liters × .26417	= gallons.
Liters × .035317	= cubic feet.
Hectoliters × 26.417	= gallons.
Hectoliters × 3.5317	= cubic feet.
Hectoliters × 2.83794	= bushel (2150.42 cu. in.).
Hectoliters × .1308	= cubic yards.
Cubic Meters × 264.17	= gallons.
Cubic Meters × 35.317	= cubic feet.
Cubic Meters × 1.308	= cubic yards.

Fluid Ounces × 29.57	= cubic centimeters.
Cubic Inches × 16.387	= cubic centimeters.
Fluid Drams × 3.69	= cubic centimeters.
Cubic Inches × .016387	= liters.
Quarts × .94636	= liters.
Gallons × 3.78543	= liters.
Cubic Feet × 28.316	= liters.
Gallons × .0378543	= hectoliters.
Cubic Feet × .28316	= hectoliters.
Bushels (2150.42 cu.in.) × .352379	= hectoliters.
Cubic Yards × 7.645	= hectoliters.
Gallons × .00378543	= cubic meters.
Cubic Feet × .028316	= cubic meters.
Cubic Yards × .7645	= cubic meters.

### POWER AND HEAT CONVERSION CONSTANTS FOR METRIC AND U.S. UNITS

Calorie × 0.003968	= B.T.U.
Joules × .7373	= foot pounds.
Kilogrammeters × 7.233	= foot pounds.
Cheval Vapeur × .9863	= Horsepower.
Kilowatts × 1.34	= Horsepower.
Kilowatt Hours × 3415	= B.T.U.
(Degrees Cent. × 1.8) + 32	= degrees Fahr.
(Degrees Reamur × 2.25) + 32	= degrees Fahr.

B.T.U. × 252	= calories.
Foot Pounds × 1.3563	= joules.
Foot Pounds × .13825	= kilogrammeters.
Horsepower × 1.014	= Cheval Vapeur.
Horsepower × .746	= kilowatts.
B.T.U. × .00029282	= kilowatt hours.
(Degrees Fahr. — 32) × .555	= degrees Cent.
(Degrees Fahr. — 32) × .444	= degrees Reamur.