

Table 1. Conversion factors for selected weights and measures.

To convert Col. 1 to Col. 2, multiply by:	Column 1 (Metric Units)	Column 2 (English Units)	To convert Col. 2 to Col. 1, multiply by:
<u>Length</u>			
0.0394	millimeter, mm (0.001 m)	inch, in	25.4
0.394	centimeter, cm	inch, in	2.54
39.37	meter, m	inch, in	0.0254
0.0328	centimeter, cm	foot, ft	30.48
3.28	meter, m	foot, ft	0.3048
1.094	meter, m	yard, yd	0.914
0.621	kilometer, km (1,000 m)	mile, mi	1.609
<u>Area</u>			
0.00155	sq. millimeter, mm ² (0.001 m) ²	square inch, in ²	645
0.155	sq. centimeter, cm ² (0.01 m) ²	square inch, in ²	6.45
0.000247	square meter, m ²	acre	4,050
10.76	square meter, m ²	square foot, ft ²	0.0929
2.47	hectare, ha	acre	0.405
247	sq. kilometer, km ² (1,000 m) ²	acre	0.00405
0.386	sq. kilometer, km ² (1,000 m) ²	square mile, mi ²	2.59
<u>Volume</u>			
0.203	milliliter, ml	teaspoon, tsp	4.93
0.0676	milliliter, ml	tablespoon, tbs	14.79
0.0338	milliliter, ml	ounce (fluid), oz	29.58
0.00973	cubic meter, m ³	acre inch, acre-inch	102.8
35.3	cubic meter, m ³	cubic foot, ft ³	0.0283
61,0000	cubic meter, m ³	cubic inch, in ³	0.0000164
0.0284	liter, L (0.001 m ³)	bushel, bu	35.24
1.057	liter, L (0.001)	quart, (liquid), qt	0.946
0.0353	liter, L (0.001)	cubic foot, ft ³	28.3
0.265	liter, L (0.001 m ³)	gallon	3.78
33.78	liter, L (0.001 m ³)	ounce (fluid), oz	0.0296
2.11	liter, L (0.001 m ³)	pint (fluid), pt	0.473

Table 2. Conversion factors for selected weights and measures (continued).

To convert Col. 1 to Col. 2, multiply by:	Column 1 (Metric Units)	Column 2 (English Units)	To convert Col. 2 to Col. 1, multiply by:
<u>Mass</u>			
0.00220	gram, g (0.001 kg)	pound, lb	454
0.0352	gram, g (0.001 kg)	ounce, (avdp), oz	28.4
2.205	kilogram, kg	pound, lb	0.454
0.01	kilogram, kg	quintal (metric), q	100
0.0011	kilogram, kg	U.S. ton (2,000 lb), ton	907
1.102	megagram, Mg (tonne)	U.S. ton (2,000 lb), ton	0.907
1.102	tonne, t	U.S. ton (2,000 lb), ton	0.907
<u>Yield and Rate</u>			
0.893	kilogram per hectare, kg/ha	pound per acre, lb/acre	1.12
0.0777	kilogram per cubic meter, kg/m³	pound per bushel, lb/bu	12.87
0.0149	kilogram per hectare, kg/ha	bushel per acre, 60 lb	67.19
0.0159	kilogram per hectare, kg/ha	bushel per acre, 56 lb	62.71
0.0186	kilogram per hectare, kg/ha	bushel per acre, 48 lb	53.75
0.107	liter per hectare, L/ha	gallon/acre	9.35
893	tonne per hectare, t/ha	pound per acre, lb/acre	0.00112
893	megagram per hectare, Mg/ha	pound per acre, lb/acre	0.00112
0.446	megagram per hectare, Mg/ha	ton (lb) per acre, ton/acre	2.24
2.24	meter per second, m s⁻¹	mile per hour	0.447
<u>Water Measurement</u>			
0.00973	cubic meter, cm³	acre-inch, acre-in	102.8
0.00981	cubic meter per hour, cm³/ha	cubic foot per second, ft³/s	101.9
4.40	cubic meter per hour, cm³/ha	U.S. gal. per minute, gal/min	0.227
8.11	hectare meter, ha/m	acre-foot, acre-ft	0.123
97.28	hectare meter, ha/m	acre-inch, acre-in	0.0103
0.081	hectare centimeter, ha/cm	acre-foot, acre-ft	12.33

Table 3. Conversion factors for selected weights and measures (continued).

To convert Col. 1 to Col. 2, multiply by:	Column 1 (Metric Units)	Column 2 (English Units)	To convert Col. 2 to Col.1, multiply by:
<u>Concentration</u>			
0.1	gram per kilogram, g/kg	percent, %	10
1	milligram per kilogram, mg/kg	parts per million, ppm	1
<u>Plant Nutrient Conversions</u>			
2.29	P	P ₂ O ₅	0.437
1.20	K	K ₂ O	0.830
1.39	Ca	CaO	0.715
1.66	Mg	MgO	0.602
<u>Temperature</u>			
1.00 (K-273)	Kelvin, K	Celsius, C	1.00 (C + 273)
(1.8 C) + 32	Celsius, C	Fahrenheit, F	0.56 (F - 32)

Sources of information:

1. U.S. Department of Agriculture. 2000. Agriculture Fact Book. Office of Communications. Online and available at <http://www.usda.gov/news/pubs/fbook00/contents.htm>, Washington DC.
2. Publications handbook and style manual. ASA-CSSA-SSA, 677 S. Segoe Rd., Madison, WI 53711.

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