## **Conversion Factors for Units**

**conversion factors** are multipliers (or dividers) which are used to change the numerical value of a measure in one type of unit into its equivalent value when measured in another type of unit. The table below gives several conversion factors -

To change	into	do this			
acres	hectares	× 0.4047	kilograms	ounces	× 35.3
acres	sq. kilometres	÷ 247	kilograms	pounds	× 2.2046
acres	sq. metres	× 4047	kilograms	tonnes	÷ 1000 #
acres	sq. miles	÷ 640 #	kilograms	tons (long/UK)	÷ 1016
barrels (oil)	cu. metres	÷ 6.29	kilograms	tons (short/US)	÷ 907
barrels (oil)	gallons (UK)	× 34.97	kilometres	metres	× 1000 #
barrels (oil)	gallons (US)	× 42 #	kilometres	miles	× 0.6214
barrels (oil)	litres	× 159	litres	cubic inches	× 61.02
centimetres	feet	÷ 30.48	litres	gallons (UK)	× 0.2200
centimetres	inches	÷ 2.54 #	litres	gallons (US)	× 0.2642
centimetres	metres	÷ 100 #	litres	pints (UK)	× 1.760
centimetres	millimetres	× 10 #	litres	pints (US liquid)	× 2.113
cubic cm	cu. inches	× 0.06102	metres	yards	÷ 0.9144#
cubic cm	litres	÷ 1000 #	metres	centimetres	× 100 #
cubic cm	millilitres	× 1 #	miles	kilometres	× 1.609
cubic feet	cubic inches	× 1728	millimetres	inches	÷ 25.4 #
cubic feet	cubic metres	× 0.0283	ounces	grams	× 28.35
cubic feet	cubic yards	÷ 27 #	pints (UK)	litres	× 0.5683
cubic feet	gallons (UK)	× 6.229	pints (UK)	pints (US liquid)	× 1.201
cubic feet	gallons (US)	× 7.481	pints (US liquid)	litres	× 0.4732
cubic feet	litres	× 28.32	pints (US liquid)	pints (UK)	× 0.8327
cubic inches	cu. cm	× 16.39	pounds	kilograms	× 0.4536
cubic inches	litres	× 0.01639	pounds	ounces	× 16 #
cubic metres	cubic feet	× 35.31	square cm	sq. inches	× 0.1550
feet	cm	× 30.48 #	square feet	sq. inches	× 144 #
feet	metres	× 0.3048 #	square feet	sq. metres	× 0.0929
feet	yards	÷9#	square inches	square cm	× 6.4516 #
fluid ounces (UK)	fluid ounces (US)	× 0.961	square inches	square feet	÷ 144 #
fluid ounces (UK)	millitres	× 28.41	square km	acres	× 247
fluid ounces (US)	fluid ounces (UK)	× 1.041	square km	hectares	× 100 #
fluid ounces (US)	millitres	× 29.57	square km	square miles	× 0.3861
gallons	pints	×8#	square metres	acre	÷ 4047
gallons (UK)	cu. feet	× 0.1605	square metres	hectares	÷ 10 000 #
gallons (UK)	gallons (US)	× 1.2009	square metres	sq. feet	× 10.76
gallons (UK)	litres	× 4.54609 #	square metres	sq. yards	× 1.196
gallons (US)	cu. feet	× 0.1337	square miles	acres	× 640 #
gallons (US)	gallons (UK)	× 0.8327	square miles	hectares	× 259
gallons (US)	litres	× 3.785	square miles	sq. km	× 2.590
grams	kilograms	÷ 1000 #	square yards	sq. metres	÷ 1.196
grams	ounces	÷ 28.35	tonnes	kilograms	× 1000 #
hectares	acres	× 2.471	tonnes	tons (long/UK)	× 0.9842
hectares	sq. km	÷ 100 #	tonnes	tons (short/US)	× 1.1023
hectares	sq. metres	× 10000 #	tons (long/UK)	kilograms	× 1016
hectares	sq. miles	÷ 259	tons (long/UK)	tonnes	× 1.016
hectares	sq. yards	× 11 960	tons (short/ US)	kilograms	× 907.2
inches	centimetres	× 2.54 #	tons (short/US)	tonnes	× 0.9072
inches	feet	÷ 12 #	yards	metres	× 0.9144 #