**BASIC CONVERSION CHART**

|  |
| --- |
| **Temperature Conversion:** |
| Fahrenheit to Celsius: | Celsius to Fahrenheit: |
| Subtract 32Multiply by 5Divide by 9 | Multiply by 9Divide by 5Add 32 |
| **Easy Conversions** |
| **Multiply** | **By** | **To Get** |
| Millimeters | x | 0.0394 | = | Inches |
| Centimeters | x | 0.3937 | = | Inches |
| Inches | x | 25.4 | = | Millimeters |
| Inches | x | 2.54 | = | Centimeters |
| Feet | x | 30.48 | = | Centimeters |
| Meters | x | 3.281 | = | Feet |
| Square Inches | x | 6.45 | = | Square Centimeters |
| Square Centimeters | x | 155 | = | Square Inches |
| Square Meters | x | 10.76 | = | Square Feet |
| Cubic Centimeters | x | .0610 | = | Cubic Inches |
| Cubic Centimeters | x | 0.0011 | = | Quarts |
| Cubic Feet | x | 1728 | = | Cubic Inches |
| Cubic Feet | x | 28.32 | = | Liters |
| Cubic Inches | x | 0.004329 | = | Gallons |
| Drams | x | .0625 | = | Ounces |
| Drams | x | 1.7718 | = | Grams |
| Liters | x | 0.2642 | = | U.S. Gallons |
| Fluid Ounces | x | 29.57 | = | Milliliters |
| Fluid Ounces | x | .02957 | = | Liters |
| Milliliters | x | 0.03382 | = | Fluid Ounces |
| Gallons of Water | x | 8.35 | = | Pounds of Water |
| Pounds of Water | x | 27.65 | = | Cubic Inches |
| Gallons | x | 231 | = | Cubic Inches |
| Grams | x | 0.0353 | = | Ounces |
| Ounces | x | 28.35 | = | Grams |
| Pounds | x | .45359 | = | Kilograms |
| Kilograms | x | 2.2046 | = | Pounds |
| Grams | x | 15.43 | = | Grains |
| Watts | x | 0.001341 | = | Horsepower |
| Amps | x | Volts | = | Watts |
| Atmospheres | x | 14.7 | = | Lbs per square inch |
| Horsepower | x | .7457 | = | Kilowatts |
| British Thermal Units | x | 3.927 x 10-4 | = | Horsepower-hours |
| British Thermal Units | x | 2.928 x 10-4 | = | Kilowatt-hours |
| Or... divide the Right column by the Middle column to get the value in the Left column. |

|  |
| --- |
| **Common Kitchen Equivalents** |
| **Standard** | **Equivalent** | **Equivalent** |
| One pinch or dash | 1/16 teaspoon |   |
| 1 teaspoon | 5 ml | 1/6 ounce |
| 1 tablespoon | 3 teaspoons | 1/2 ounce |
| 1/4 cup | 4 tablespoons | 2 ounces |
| 1/3 cup | 5 tablespoon + 1 teaspoon | 3 ounces |
| 1/2 cup | 8 tablespoons | 4 ounces |
| 1 gill | 1/2 cup | 4 ounces |
| 1 cup | 16 tablespoons | 8 ounces |
| 1 pint | 2 cups | 16 ounces |
| 1 quart | 4 cups | 32 ounces |
| 1 quart | 2 pints | 32 ounces |
| 1 gallon | 4 quarts | 128 ounces |
| 1 peck | 8 quarts |   |
| 1 bushel | 4 pecks |   |
| 1 pound dry measure | 16 ounces |

tsp = teaspoon
t = tablespoon
oz = ounce
c = cup
pt = pint
qt = quart
bu = bushel
lb = pound

|  |
| --- |
| **Some Formulas** |
| Area of Square | Side Squared |
| Area of Circle | 3.1415927 x Radius Square |
| Area of Sphere | 4 x 3.1415927 x Radius Squared |
| Area of Parallelogram | Base x Height |
| Circumference of Circle | 2 x 3.1415927 x Radius |
| Volume of Rectangular Box | Length x Width x Height |
| Volume of Cone | 1/3 x 3.1415927 x Radius Squared x Height |
| Volume of Cylinder | 3.1415927 x Radius Squared x Height |
| Volume of Sphere | 4 x 3.1415927 x Radius Cubed ÷ 3 |
| Volume of Cube | Side Cubed |

a = area
c = circumference
v = volume
sq = square
cu = cubic
r = radius
d = diameter
l = length
w = width
h = height
s = side
Pi = 3.1415927 (approx)

|  |
| --- |
| **How to figure out the capacity of a round (cylindrical) container** |
| Learn ahead of cooking or baking...*...How much batter to put in a cake pan, or...How much liquid a non-marked sauce pan will hold, for example.*The formula is intended for straight-sided pans, however you can also get a good approximation of capacity **First take these measurements:***For the Radius:* Measure across the inside of the pan, and divide by two.     (Multiply this figure by itself to get the Radius Squared for the formula.)*For the Height:* Measure from the inside bottom up to the fill line.     (Measure up to the lip of the pan if you're filling it to the brim.)**3-part formula:**(1)   Pi  x  r²  x  h = volume (in cubic inches)(2)   volume  /  231 = percentage of gallon(3)   percentage of gallon  x  128 = capacity (in ounces)Pi = 3.1415927231 = Cubic Inches in a Gallon of Liquid128 = Ounces in a gallonr = Radius = one half the Diameterr² = Radius Squared = Radius x Radiush = Heightx = times/ = divided by**Therefore, using your calculator:**(1)    3.1415927 times *Radius Squared* times *Height* = *Volume*(2)   *Volume* divided by 231 = *Percentage of 1 Gallon*(3)   *Percentage of 1 Gallon* times 128 = *Capacity in Liquid Ounces*  |
| **Linear Measure Equivalents** |
| 1 micron | 0.001 mm |   |   |
| 1 in | 2.54 cm |   |   |
| 1 hand | 4 in | 1/3 ft |   |
| 1 span | 9 in |   |   |
| 1 ft | 12 in | 30.48 cm | 0.3 m |
| 1 yd | 3 ft |   |   |
| 1 m | 3.28 ft | 39.37 in |   |
| 1 fathom | 6 ft |   |   |
| 1 rod, pole or perch | 16.5 ft | 5.5 yd |   |
| 1 furlong | 660 ft | 220 yd | 40 poles |
| 1 km | 0.62 mi |   |   |
| 1 mi | 5,280 ft | 1,760 yd | 8 furlongs |
| 1 mi | 320 rods | 1.61 km |   |
| 1 league | 3 mi |   |   |

in = inch
ft = foot
yd = yard
mi = mile
cm = centimeter
m = meter
km = kilometer

|  |
| --- |
| **Square Measure Equivalents** |
| 144 | square inches | 1 square foot |
| 9 | square feet | 1 square yard |
| 30.25 | square yards | 1 square rod |
| 160 | square rods | 1 acre |
| 640 | acres | 1 square mile |
| **Cubic Measure Equivalents** |
| 1728 | cubic inches | 1 cubic foot |
| 27 | cubic feet | 1 cubic yard |
| **Liquid (Fluid) Measure Equivalents** |
| 0.125 oz | 1 fl dram | 60 minims |   |   |   |
| 1 oz | 8 fl drams |   |   |   |   |
| 4 oz | 1 gill |   |   |   |   |
| 8 oz | 1 c |   |   |   |   |
| 16 oz | 2 c | 1 pt |   |   |   |
| 32 oz | 4 c | 2 pt | 1 qt |   |   |
| 33.8 oz | 4.23 c | 2.1134 pt | 1.0567 qt | 0.264 gal | 1 l |
| 128 oz | 16 c | 8 pt | 4 qt | 1 gal | 3.7853 l |
| 4032 oz | 1 bbl | 3.94 pt | 7.875 qt | 31.5 gal |   |
| 8064 oz | 1 hhd | 7.875 pt | 15.75 qt | 63 gal |   |

fl = fluid
oz = ounce
c = cup
pt = pint
qt = quart
gal = gallon
bbl = barrel
hhd = hogshead
l = liter

|  |
| --- |
| **Metric Equivalents, Liquid or Fluid Measure** |
|   | **Or** | **Dry** | **Liquid** |
| 1 centiliter |   | 0.6102 cubic inches | 0.338 ounces |
| 1 deciliter | 10 centiliters | 6.102 cubic inches | .0845 gill |
| 1 liter | 10 deciliters | 0.908 quart | 1.0567 quarts |
| 1 decaliter | 10 liters | 9.08 quarts | 2.64 gallons |

cl = centiliter
dl = deciliter
l = liter
dal = decaliter
cu in = cubic inch
oz = ounce
qt = quart
gal = gallon

|  |
| --- |
| **Weight Equivalents** |
| **Avoirdupois** |
| 16 drams | 437.5 grains | 1 ounce | 28.35 grams |
| 16 ounces | 7000 grains | 1 pound | 453.59 grams |
| 1 pound | 0.45 kilograms |   |   |
| 1 kilogram | 2.2 pounds |   |   |
| 100 pounds | 1 central | 1 hundredweight |   |
| 2000 pounds | 1 short ton |   |   |
| 2204.6 pounds | 1 metric ton | 1000 kilograms |   |
| 2240 pounds | 1 long ton or gross ton |   |   |
| **Also (in Great Britain)** |
| 14 pounds | 1 stone |   |   |
| 2 stones | 1 quarter |   |   |
| 4 quarters | 112 pounds | 1 hundredweight |   |
| 20 hundredweight | 1 long ton |   |   |
| **Troy (Precious Metals)** |
| 24 grains | 1 pennyweight |   |   |
| 20 pennyweights | 480 grains | 1 ounce |   |
| 12 ounces | 5760 grains | 1 pound |   |
| **Apothecaries' Weight** |
| 20 grains | 1scruple |   |   |
| 3 scruples | 1 dram |   |   |
| 8 drams | 1 ounce |   |   |
| 12 ounces | 5760 grains | 1 pound |   |
| **Paper** |
| 24 sheets | 1 quire |   |
| 20 quires | 1 short ream | 480 sheets |
| 500 sheets | 1 ream |   |
| 10 reams | 1 bale |   |
| **Weight of Water** |
| 1 cubic inch | .0360 pound |
| 1 cubic foot | 62.3 pounds |
| 1 cubic foot | 7.48052 U.S. gallons |
| 1 Imperial gallon | 10.0 pounds |
| 1 U.S. gallon | 8.33 pounds |

|  |
| --- |
| **Mesh Equivalents** |
| **U.S. MESH** | **INCHES** | **MICRONS** | **MILLIMETERS** |
| 3 | 0.2650 | 6730 | 6.730 |
| 4 | 0.1870 | 4760 | 4.760 |
| 5 | 0.1570 | 4000 | 4.000 |
| 6 | 0.1320 | 3360 | 3.360 |
| 7 | 0.1110 | 2830 | 2.830 |
| 8 | 0.0937 | 2380 | 2.380 |
| 10 | 0.0787 | 2000 | 2.000 |
| 12 | 0.0661 | 1680 | 1.680 |
| 14 | 0.0555 | 1410 | 1.410 |
| 16 | 0.0469 | 1190 | 1.190 |
| 18 | 0.0394 | 1000 | 1.000 |
| 20 | 0.0331 | 841 | 0.841 |
| 25 | 0.0280 | 707 | 0.707 |
| 30 | 0.0232 | 595 | 0.595 |
| 35 | 0.0197 | 500 | 0.500 |
| 40 | 0.0165 | 400 | 0.400 |
| 45 | 0.0138 | 354 | 0.354 |
| 50 | 0.0117 | 297 | 0.297 |
| 60 | 0.0098 | 250 | 0.250 |
| 70 | 0.0083 | 210 | 0.210 |
| 80 | 0.0070 | 177 | 0.177 |
| 100 | 0.0059 | 149 | 0.149 |
| 120 | 0.0049 | 125 | 0.125 |
| 140 | 0.0041 | 105 | 0.105 |
| 170 | 0.0035 | 88 | 0.088 |
| 200 | 0.0029 | 74 | 0.074 |
| 230 | 0.0024 | 63 | 0.063 |
| 270 | 0.0021 | 53 | 0.053 |
| 325 | 0.0017 | 44 | 0.044 |
| 400 | 0.0015 | 37 | 0.037 |
| 625 | 0.0008 | 20 | 0.020 |
| 1250 | 0.0004 | 10 | 0.010 |
| 2500 | 0.0002 | 5 | 0.005 |
|

|  |
| --- |
| **Metric Units - Linear Measure** |
| 1 centimeter | 10 millimeters |   |   |
| 1 decimeter | 10 centimeters | 100 millimeters |   |
| 1 meter | 10 decimeters | 100 centimeters | 1000 millimeters |
| 1 decameter | 10 meters | 100 decimeters | 1000 centimeters |
| 1 hectometer | 10 decameters | 100 meters | 1000 decimeters |
| 1 kilometer | 10 hectometers | 100 decameters | 1000 meters |

mm = millimetercm = centimeterdm = decimeterm = meterkm = kilometer

|  |
| --- |
| **Square Measure** |
| 1 sq. cm. | 100 sq. mm. |   |   |
| 1 sq. dm. | 100 sq. cm. | 10,000 sq. mm. |   |
| 1 sq. m. | 100 sq. dm. | 10,000 sq. cm. | 1,000,000 sq. mm. |

|  |
| --- |
| **Cubic Measure** |
| 1 cu. cm. | 1,000 cu. mm. |
| 1 cu. dm. | 1,000 cu. cm. |
| 1 cu. m. | 1,000 cu. dm. |
|  **Liquid Measure** |
| 1 centiliter | 10 milliliters |
| 1 deciliter | 10 centiliters |
| 1 liter | 10 deciliters |
| 1 decaliter | 10 liters |
| 1 hectoliter | 10 decaliters |
| 1 kiloliter | 10 hectoliters |

|  |
| --- |
| **Weights** |
| 1 centigram | 10 milligrams |   |   |
| 1 decigram | 10 centigrams | 100 milligrams |   |
| 1 gram | 10 decigrams | 100 centigrams | 1000 milligrams |
| 1 decagram | 10 grams |   |   |
| 1 hectogram | 10 decagrams | 100 grams |   |
| 1 kilogram | 10 hectograms | 100 decagrams | 1000 grams |
| 1 quintal | 100 kilograms |   |   |
| 1 ton | 10 quintals | 1000 kilograms |   |

mg = milligramcg = centigramdg = decigramg = gramkg = kilogram |
| **Acreage** |
| 1 acre | 43,560 square feet |   |   |
| 2 acres | 87,30 square feet |  |  |
| 5 acres | 217,800 square feet |  |  |
| 10 acres | 435,600 square feet | 330 feet x 1320 feet (land lot size) |  |
| 25 acres | 1,089,000 square feet |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |