

COMMON SYSTEMS OF WEIGHTS AND MEASURES

METRIC SYSTEM

Metric weight

1 femtogram (fg) = 0.001 pg

1 picogram (pg) = 0.001 ng

1 nanogram (ng) = 0.001 μ g

1 microgram (μ g) = 0.001 mg

1 milligram (mg) = 0.001 g

1 centigram (cg) = 0.01 g

1 decigram (dg) = 0.1 g

1 gram (g) = 1 g

1 dekagram (dag) = 10 g

1 hectogram (hg) = 100 g

1 kilogram (kg) = 1000 g

Metric liquid measure

1 femtoliter (fL) = 0.001 pL

1 picoliter (pL) = 0.001 nL

1 nanoliter (nL) = 0.001 μ L

1 microliter (μ L) = 0.001 mL

1 milliliter (mL) = 0.001 L

1 centiliter (cL) = 0.01 L (10 mL)

1 deciliter (dL) = 0.1 L (100 mL)

1 liter (L) = 1 L (1000 mL)

1 dekaliter (daL) = 10 L

1 hectoliter (hL) = 100 L

1 kiloliter (kL) = 1000 L

APOTHECARY SYSTEM*

Apothecary weight equivalents

1 grain[†] (gr) = 1 gr

1 scruple (\mathfrak{S}) = 20 gr

1 dram (\mathfrak{D}) = 60 gr = 3 \mathfrak{S}

1 ounce (\mathfrak{O}) = 480 gr = 8 \mathfrak{D}

1 pound (lb) = 7680 gr = 16 \mathfrak{L}

Apothecary volume equivalents

1 minim (\mathfrak{M}) = 1 \mathfrak{M}

1 fluidram ($\mathfrak{f}\mathfrak{S}$) = 60 \mathfrak{M}

1 fluid ounce ($\mathfrak{f}\mathfrak{O}$) = 480 \mathfrak{M} = 8 $\mathfrak{f}\mathfrak{S}$

1 pint (pt or \mathfrak{O}) = 7680 \mathfrak{M} = 16 $\mathfrak{f}\mathfrak{O}$

1 quart (qt) = 15360 \mathfrak{M} = 32 $\mathfrak{f}\mathfrak{O}$

1 gallon (gal or cong) = 61440 \mathfrak{M} = 128 $\mathfrak{f}\mathfrak{O}$

*Apothecary—used in preparation of pharmaceuticals.

[†]The grain in each of the above systems has the same value and thus serves as a basis for the interconversion of the other units.

AVOIRDUPOIS SYSTEM*[†]

Avoirdupois equivalents

1 ounce (oz) = 437.5 grains (gr)

1 pound (lb) = 16 ounces (oz) = 7000 grains (gr)

*[†]Avoirdupois is used by manufacturers and wholesalers.