

LONG MEASURE

Inches.	Feet.	Yards.	Fathoms.	Poles.	Furlongs.	Miles.	French Metres.
1.	= .083	= .02778	= .0130	= .005	= .000126	= .0000158	= .0254
12.	1.	.333	.667	.00151	.001864	.001864	.3048
36.	3.	1.	.5	.182	.00454	.000568	.9144
72.	6.	2.	.1	.364	.0091	.001136	1.8287
198.	16.5	5.5	2.75	1.	.025	.003125	5.0291
7920.	660.	220	110.	40.	1.	.125	201.16
63360.	5280.	1760.	880.	320.	8.	1.	1609.315

A palm = 3 inches.
A span = 9 inches.
A hand = 4 inches.
A cable's length = 120 fathoms.

Avoirdupois Weight

The Grain is the same in Troy, Apothecaries and Avoirdupois Weights.
The standard Avoirdupois Pound is the weight of 27.7015 Cubic Inches of distilled water weighed in the air, at 35.85 degrees Fahrenheit, barometer at 30 inches.
27.343 Grains = 1 Drachm.

Drachms.	Ozs.	Lbs.	Qrs.	Cwts.	Ton.	French Grammes.
1.	= .0025	= .0039	= .000139	= .000035	= .00000174	= 1.771846
10.	1.	.0625	.00223	.000558	.000028	28.34954
256.	16.	1.	.0357	.00893	.000447	453.59
7104.	448.	28.	1.	.25	.0125	12700.
28672.	1792.	112.	4.	1.	.05	50802.
573440.	35840.	2240.	80.	20.	1.	1016040.

A stone = 14 pounds.
A quintal = 100 pounds.

Troy Weight

For Gold, Silver and Precious Metals.

Grains.	Dwts.	Ozs.	Lbs.	French Grammes.
1.	= .04167	= .00208	= .0001736	= .0648
24.	1.	.05	.004167	1.555
480.	20.	1.	.0833	31.1035
5760.	240.	12.	1.	373.242

175 pounds Troy = 144 Avoirdupois.
Pounds Avoirdupois $\times .82286$ = pounds Troy.
Pounds Troy $\times 1.2153$ = pounds Avoirdupois.

The Jeweller's Carat is equal, in the United States to 3.2 grains; in London, to 3.17 grains; in Paris, to 3.18

Apothecaries' Weight

United States and British.

20 grains 1 scruple.
3 scruples . . . 1 drachm = 60 grs.
8 drachms . . . 1 ounce = 24 scrs. = 480 grs.
12 ounces . . . 1 pound = 96 drms. = 288 scrs. = 5760 grs.

In Troy and Apothecaries' Weights the grain, ounce and pound are the same.

French Weights

EQUIVALENT TO AVOIRDUPOIS.

	Grains.	Ozs.	Lbs.	Tons, 2240 lbs.
Milligramme.....	.015433			
Centigramme.....	1.54331	.000352	.000022	
Decigramme.....	15.4331	.003527	.000220	
Gramme.....	154.331	.035275	.002204	
Decagramme.....	1543.31	.352758	.022047	
Hectogramme.....	15433.1	3.52758	.220473	.000098
Kilogramme.....		35.2758	2.20473	.000984
Myriogramme.....		352.758	22.0473	.009842
Quintal.....		3527.58	220.473	.098425
Millier or Tonne.....		35275.8	2204.73	.984258

Specific Gravity and Weights of Various Substances

NAME OF SUBSTANCE.	WEIGHTS.			SPECIFIC GRAVITY.
	Per Cubic Foot.	Per Square Foot, 1 Inch Thick.	Per Cubic Inch.	
Water, Pure.....	LBS. 62.3	LBS. 5.19	LBS. .036	1.000
Water, Sea.....	64.3	5.36	.037	1.028
Wrought Iron.....	480.	40.00	.260	7.70
Cast Iron.....	450.	37.50	.260	7.20
Steel.....	490.	40.84	.263	7.84
Lead.....	710.	59.16	.410	11.36
Copper, Rolled.....	548.	45.66	.317	8.80
Brass, Rolled.....	524.	43.66	.302	8.40
Sand.....	98.	8.23	.037	1.57
Clay.....	120.	10.00	.069	1.92
Brick Work, Common.....	120.	10.00	.069	1.92
Brick Work, Close Joints.....	140.	11.66	.081	2.24
Limestone.....	168.	13.66	.090	2.68
Glass.....	156.	13.00	.086	2.40
Pine, White.....	30.	2.50	.017	.48
Pine, Yellow.....	35.	2.91	.019	.56
Hemlock.....	25.	2.08	.015	.40
Maple.....	49.	4.08	.028	.78
Oak, White.....	50.	4.16	.030	.80
Walnut.....	41.	3.41	.023	.65