

Unseasoned pine and oak 15 to 20

Earth (common loam):

Dry, loose 72 to 80

Moist, moderately packed 90 to 100

Soft mud, packed 110 to 120

Masonry:

Brickwork 100 to 140

Roughly scabbled mortar rubble 140 to 150

Mortar, hardened 103

Woods: Pounds per 1,000 board feet.

Fir (balsam) 2,170 26

Hemlock 2,330 to 2,580 28 to 31

Maple 3,250 to 3,920 39 to 47

Oak 3,080 to 4,670 37 to 56

Pine (American white) 1,830 to 2,580 22 to 31

Pine (yellow) 1,920 to 3,080 23 to 37

Poplar 1,830 to 2,580 22 to 31

The wood is supposed to be seasoned and of average dryness.

Common Rules of Measurement.

Rectangle Area = length × width.

Solid with rectangular sides Volume = length × width × height.

Circle { Circumference = 3.1416 × diameter.
Area = 0.7854 × diameter × diameter.

Cylinder { Area (exclusive of that of ends) = 3.1416 × diameter × height.
Volume = 0.7854 × diameter × diameter × height.

(OVER)

MISCELLANEOUS PUBLICATIONS—NO. 39

HOUSEHOLD WEIGHTS AND MEASURES

The object of this card is to present in convenient form the weights and measures tables most useful for household¹ purposes.

In addition to the capacity measures illustrated, every kitchen should be provided with a good household weights and measures test set. This will be found indispensable in checking the amounts of commodities purchased and very useful for a variety of other purposes. A complete set comprises a weighing scale of from 10 to 30 pounds capacity or more graduated to 1 ounce or less, a set of liquid measures, a yard measure or a tape 3 or 6 feet in length, and, perhaps, a set of dry measures. These pieces should be of simple but rugged construction and of satisfactory accuracy and should, whenever possible, be tested by and bear the seal of a weights and measures official.

Common Kitchen Measures.

EQUIVALENTS OF CAPACITY.

(All measures level full.)

| | | |
|---------------------------|---|---------------|
| 3 teaspoons | = | 1 tablespoon. |
| $\frac{1}{2}$ fluid ounce | = | |
| 16 tablespoons | = | 1 cup. |
| 2 gills | = | |
| $\frac{1}{2}$ liquid pint | = | |
| 8 fluid ounces | = | |
| 1 liquid pint | = | 2 cups. |
| 16 fluid ounces | = | |



Liquid Measure.

| | | |
|------------------------|---|------------------------------|
| 4 fluid ounces | = | 1 gill. |
| 4 gills | = | 1 pint. |
| 2 pints | = | 1 quart. |
| 4 quarts | = | 1 gallon (231 cubic inches). |
| $3\frac{1}{4}$ gallons | = | 1 barrel. |
| 2 barrels | = | 1 hogshhead. |

Dry Measure.

(For fruits, vegetables, and other dry commodities.)

| | | |
|------------|---|----------------------------------|
| 2 pints | = | 1 quart. |
| 8 quarts | = | 1 peck. |
| 4 pecks | = | 1 bushel (2150.42 cubic inches). |
| 105 quarts | = | 1 barrel (7056 cubic inches). |

The pint and quart dry measures are about 16 per cent larger than the pint and quart liquid measures.

Avoirdupois Weight.

| | | |
|------------------------|---|-------------------------------------|
| $27\frac{1}{2}$ grains | = | 1 dram. |
| 16 drams | = | 1 ounce. |
| 16 ounces | = | 1 pound. |
| 4 quarters | = | 1 hundredweight. |
| 20 hundredweight | = | 1 ton. |
| | | { Short hundredweight = 100 pounds. |
| | | { Long hundredweight = 112 pounds. |
| | | { Short ton = 2,000 pounds. |
| | | { Long ton = 2,240 pounds. |

Approximate Weights of Some Common Dry Commodities.

| Pounds per bushel. | | Pounds per bushel. | | | |
|--------------------|----|-------------------------|----|-----------------------|------------------------|
| Apples | 48 | Peaches | 48 | Ice: | |
| Beans | 60 | Peanuts | 22 | 1 cubic foot | = 57.2 pounds. |
| Beets | 60 | Pears | 58 | 30 cubic inches | = 1 pound. |
| Carrots | 50 | Peas (dried) | 60 | Sugar, granulated: | |
| Cranberries | 32 | Peas (green, unshelled) | 56 | 1 cup | = $\frac{1}{2}$ pound. |
| Cucumbers | 48 | Potatoes (white) | 60 | Butter: 1 cup | = $\frac{1}{2}$ pound. |
| Onions | 57 | Potatoes (sweet) | 54 | Lard: 1 cup | = $\frac{1}{2}$ pound. |
| Parsnips | 50 | Tomatoes | 56 | Flour: 1 cup | = $\frac{1}{2}$ pound. |
| | | Turnips | 55 | | |
| | | | | Rice: 1 cup | = $\frac{1}{2}$ pound. |
| | | | | Cornmeal: 1 cup | = 5 ounces. |
| | | | | Raisins (stemmed): | |
| | | | | 1 cup | = 6 ounces. |
| | | | | Currants (cleaned): | |
| | | | | 1 cup | = 6 ounces. |
| | | | | Bread crumbs (stale): | |
| | | | | 1 cup | = 2 ounces. |
| | | | | Chopped meat | |
| | | | | (packed): 1 cup | = $\frac{1}{2}$ pound. |

These weights are approximate only and should therefore not be used in determining whether correct measure is given or received.

¹ Circular of the Bureau of Standards No. 55, entitled "Measurements for the Household," contains in popular form a large amount of information which is very useful about the home. In addition to discussing weighing and measuring as done in the up-to-date kitchen, this circular treats of the measurement and economical use of heat, light, gas, electricity, water, time, etc. Copies may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at 15 cents each.