BAKING INGREDIENT WEIGHT VS. VOLUME CONVERSION SHEET

PRECISION BAKER'S SCALE MATRIX | CUPS TO GRAMS & OUNCES FOR 18 ESSENTIAL INGREDIENTS

THE GOLDEN RULE OF PASTRY PRECISION:
A cup of flour can weigh anywhere from 115g to 160g depending on humidity and scooping method. Weighing ingredients in grams guarantees 100% reproducible bakes.

BAKING INGREDIENTS PRECISION WEIGHT EQUIVALENTS

Baking Ingredient	1 Cup (g / oz)	1/2 Cup (g)	1/3 Cup (g)	1/4 Cup (g)	1 Tablespoon (g)
All-Purpose Flour (Spoon & Leveled)	**120 g (4.25 oz)**	60 g	40 g	30 g	8 g
Bread Flour (High Protein)	**128 g (4.50 oz)**	64 g	43 g	32 g	8 g
Cake Flour (Sifted)	**114 g (4.00 oz)**	57 g	38 g	28.5 g	7 g
Whole Wheat Flour	**125 g (4.40 oz)**	62.5 g	42 g	31 g	8 g
Almond Flour (Fine Blanched)	**96 g (3.40 oz)**	48 g	32 g	24 g	6 g
Granulated White Cane Sugar	**200 g (7.05 oz)**	100 g	67 g	50 g	12.5 g
Brown Sugar (Light or Dark, Packed)	**215 g (7.60 oz)**	107.5 g	72 g	54 g	13.5 g
Confectioners' Powdered Sugar	**120 g (4.25 oz)**	60 g	40 g	30 g	7.5 g
Rolled Old-Fashioned Oats	**90 g (3.20 oz)**	45 g	30 g	22.5 g	5.6 g
Unsalted Butter (Solid or Melted)	**227 g (8.00 oz)**	113.5 g	75.5 g	57 g	14.2 g
Vegetable Oil / Canola	**218 g (7.70 oz)**	109 g	73 g	54.5 g	13.6 g
Whole Milk / Heavy Cream	**242 g (8.50 oz)**	121 g	81 g	60.5 g	15.1 g
Sour Cream / Full Fat Greek Yogurt	**240 g (8.45 oz)**	120 g	80 g	60 g	15 g
Pure Honey / Pure Maple Syrup	**340 g (12.0 oz)**	170 g	113 g	85 g	21.2 g
Dark Molasses	**328 g (11.6 oz)**	164 g	109 g	82 g	20.5 g
Unsweetened Dutch Cocoa Powder	**85 g (3.00 oz)**	42.5 g	28 g	21 g	5.3 g
Semi-Sweet Chocolate Chips	**170 g (6.00 oz)**	85 g	57 g	42.5 g	10.6 g
Active Dry / Instant Yeast	**150 g (5.30 oz)**	75 g	50 g	37.5 g	9.4 g (1 Packet=7g)

FLOUR DENSITY & SIFTING PROTOCOL

Fluffed & Spooned:
Standard recipe default. Whisk flour in canister, spoon loosely into measuring cup, sweep level with knife (120g).

Dipped & Scooped:
Dipping cup directly compresses flour (140g-160g), creating dense, dry, rubbery cakes and breads.

'Sifted Flour' vs 'Flour, Sifted':
'1 Cup Sifted Flour' = Sift before measuring (110g). '1 Cup Flour, Sifted' = Measure 1 cup first (120g), then sift.

BUTTER & LIQUID DENSITY RULES

The Butter Stick Rule:
1 Stick = 1/2 Cup = 8 Tbsp = 4 oz = 113.5 grams. 1/2 Stick = 1/4 Cup = 4 Tbsp = 2 oz = 56.7 grams.

Water vs Honey Weight:
1 Cup of Water = 240g. 1 Cup of Pure Honey = 340g (42% denser than water due to concentrated sugars).

Egg Weights (Large):
1 Large Egg with shell = 57g. Without shell: White = 30g, Yolk = 18g, Total liquid egg = 48g-50g.