

Cooking *conversions.*

Cups ↔ mL, oven temperatures across **Fahrenheit, Celsius, and gas marks**, and ingredient density (grams per cup) for accurate baking. The reference for cooking from international recipes.

The chart

MEASURE	US CUSTOMARY	METRIC
1 teaspoon (tsp)	1 tsp = 1/3 tbsp	≈ 4.93 mL (round to 5 mL)
1 tablespoon (tbsp)	1 tbsp = 3 tsp = 1/16 cup	≈ 14.79 mL (round to 15 mL)
1 fluid ounce (fl oz)	1 fl oz = 2 tbsp = 1/8 cup	≈ 29.57 mL (round to 30 mL)
1/4 cup	1/4 cup = 4 tbsp = 2 fl oz	≈ 59.15 mL (round to 60 mL)
1/3 cup	1/3 cup = 5 tbsp + 1 tsp	≈ 78.86 mL (round to 80 mL)
1/2 cup	1/2 cup = 8 tbsp = 4 fl oz	≈ 118.29 mL (round to 120 mL)
2/3 cup	2/3 cup = 10 tbsp + 2 tsp	≈ 157.73 mL (round to 160 mL)
3/4 cup	3/4 cup = 12 tbsp = 6 fl oz	≈ 177.44 mL (round to 180 mL)
1 cup	1 cup = 16 tbsp = 8 fl oz	≈ 236.59 mL (round to 240 mL)
1 pint (US)	1 pt = 2 cups = 16 fl oz	≈ 473.18 mL
1 quart (US)	1 qt = 2 pt = 4 cups	≈ 946.35 mL

MEASURE	US CUSTOMARY	METRIC
1 gallon (US)	1 gal = 4 qt = 16 cups	≈ 3.785 L

About 'cups' globally. The US legal cup is 240 mL; the US customary cup is 236.59 mL; the metric cup (Australia/NZ) is 250 mL; the imperial cup (UK, historical) is 284 mL. Most US recipes use the customary 236.59 mL, but rounding to 240 mL is fine for almost everything — except very precise baking.

Common applications

OVEN TEMPERATURE (F)	OVEN TEMPERATURE (C)	GAS MARK (UK)	DESCRIPTION
225 °F	110 °C	Gas mark 1/4	Very slow (drying, slow cooking)
250 °F	120 °C	Gas mark 1/2	Very slow
275 °F	140 °C	Gas mark 1	Slow / low
300 °F	150 °C	Gas mark 2	Slow
325 °F	165 °C	Gas mark 3	Moderately slow
350 °F	175 °C	Gas mark 4	Moderate (standard baking)
375 °F	190 °C	Gas mark 5	Moderately hot
400 °F	200 °C	Gas mark 6	Hot
425 °F	220 °C	Gas mark 7	Hot (roasting)
450 °F	230 °C	Gas mark 8	Very hot

OVEN TEMPERATURE (F)	OVEN TEMPERATURE (C)	GAS MARK (UK)	DESCRIPTION
475 °F	245 °C	Gas mark 9	Very hot (pizza, breads)
500 °F	260 °C	Gas mark 10	Very hot (high-temp pizza)
550 °F	290 °C	Beyond gas	Broiler / pizza-stone temperatures

Common pitfalls

- **Fan / convection ovens run ~20 °C (35 °F) hotter than conventional ovens.** A recipe calling for 180 °C conventional means about 160 °C fan-assisted. Always check whether the recipe specifies which.
- **Volume measures vary by ingredient density.** 1 cup of flour is ~120 g; 1 cup of sugar is ~200 g; 1 cup of brown sugar (packed) is ~220 g; 1 cup of butter is ~227 g. Baking by weight (grams) is always more accurate than by volume.
- **UK and US measurements differ.** A UK pint is 568 mL; a US pint is 473 mL — a 20% difference. UK 'fl oz' = 28.4 mL; US 'fl oz' = 29.6 mL. Recipes from the UK won't scale cleanly to US measures.
- **Liquid vs dry measuring cups matter for baking.** Liquid cups have a spout and measure to the line. Dry cups are flat-topped and meant to be leveled. Using one for the other shifts the actual quantity by 5-10%.
- **Old recipes use unfamiliar units.** A 'dram' is 1/8 fl oz; a 'gill' is 1/2 cup; a 'jigger' is 1.5 fl oz (cocktail measure). When in doubt, use volume in mL.

Common questions

Why does my recipe say 350°F and my oven only shows 180°C?

350°F equals about 177°C, so 180°C is the standard metric equivalent (most ovens have 10°C increments, not exact conversions). For most recipes the difference is negligible. A more precise table: 250°F = 120°C, 325°F = 165°C, 350°F = 175-180°C, 375°F = 190°C, 400°F = 205°C, 425°F = 220°C.

How much is a 'stick' of butter?

In US recipes, one stick = 1/2 cup = 8 tablespoons = 4 ounces = 113 grams. The standard US butter package is 4 sticks (1 pound). If a UK or European recipe calls for grams, just use the metric directly — easier than going through tablespoons.

Are UK and US tablespoons the same?

No. US tablespoon = 14.79 ml, UK/imperial tablespoon = 17.76 ml, Australian tablespoon = 20 ml. The difference matters for dry ingredients like baking soda or yeast where a 20-30% miscalibration ruins the recipe. For Australian recipes specifically, check whether the tablespoon is 15 ml or 20 ml — both conventions exist.

How do I convert 'a cup of flour' to grams?

Depends on the flour and how packed it is. Standard US conversions: 1 cup all-purpose flour = 125 g (spooned, leveled) or 140 g (scooped). 1 cup bread flour = 130 g. 1 cup whole wheat = 120 g. For accurate baking, weigh ingredients — volume measurements vary ±15% based on packing.

Why are baking measurements more sensitive than cooking?

Baking is chemistry: ratios between flour, fat, leavening, and liquid determine structure. A 10% error in flour can make a cake collapse. Stovetop cooking is more forgiving because you can adjust as you go — taste and tweak. For baking, always weigh; for cooking, volume measurements are usually fine.

Sources

- **US legal cup:** US FDA 21 CFR 101.9(b)(5) — 240 mL for nutrition labeling.
- **US customary cup:** 1/16 US gallon = 236.59 mL.
- **Metric cup (AU/NZ):** 250 mL by national convention.
- **Oven conversions:** Industry-standard gas mark to °C conversions per UK ovens.

Disclaimer. Baking is more sensitive to measurement than savory cooking. For consistent baking results, weigh ingredients in grams rather than measuring by volume.