

Coffee & Latte Art — Workbook

This workbook turns the course into deliberate practice at your own machine. Each section matches a course module and asks you to weigh and time real shots, dial a bag in by ratio, steam jug after jug until the milk looks like wet paint, and pour a heart, rosetta, and tulip on a clean brown base, with an etched save for when a pour fails. Work through it beside an actual espresso machine and you will finish able to pull a balanced shot, produce true microfoam, and pour a clean pattern on demand, with logs so your good cups repeat instead of being lucky.

Espresso Foundations: The Four Variables and a Repeatable Shot

Get your bench measuring, dial a bag in by ratio and time, and fix channelling so the espresso is worth pouring into.

Worksheet: Bench and gear audit

Before pulling anything, record what you have versus what the by-weight workflow needs, so you buy only the gaps. Prioritise an accurate gram scale over any other upgrade.

Gram scale accurate to 0.1 g for dosing? (yes / no — buy this first)

Second scale or scale-under-cup for yield? (yes / no)

Timer or scale with built-in timer? (yes / no)

Grinder make and model, and whether it is stepped or stepless

Basket size in use (single ~9 g / double ~18 g)

Distribution tool and/or WDT needle tool owned? (yes / no — a paperclip works to start)

Tamper size matches basket diameter? (yes / no)

Thermometer for milk later (stick-on / probe / none)

Exercise: First dial-in to 1:2

Dial a single bag in from scratch using only grind as your control. Dose 18 g (or your basket's dose), target double the weight out, and pull, taste, and adjust grind until balanced. Change only grind between shots, one or two steps at a time.

• What was your dose, target yield, and the actual time of your first shot, and did it taste sour or bitter?

• Which way did you move grind to correct it, and what did the next shot's time and taste become?

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- How many shots did it take to land a balanced cup, and what final grind setting and time got you there?
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- Write the cause-and-effect rule in your own words: too fast and sour means do what, too slow and bitter means do what?
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Exercise: Channelling hunt and WDT fix

Deliberately provoke and then cure channelling so you can recognise it. Pull one shot with no distribution or WDT and a sloppy tamp, then pull an identical shot after WDT-stirring and a level tamp. Watch the streams as each runs.

- Did the unprepared shot spray sideways, sputter, or shoot a fast jet from one spot, and how did it taste?
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- After WDT and a level tamp, how did the stream and the taste change?
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- Can you now tell channelling (a prep fault) apart from a too-coarse grind (a fast but even pale shot)?
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Checklist: Pre-shot prep checklist

- Tare the basket on the scale and grind directly into it for an exact dose
- Break up clumps and WDT-stir the grounds level
- Tamp straight down, firm and flat, with the surface level
- Wipe the rim and lock the portafilter in without a long delay
- Tare the cup on the scale and start the timer the instant the pump engages
- Stop at target yield by weight, then read and record the time
- Taste the shot alone before adding milk and note sour / balanced / bitter

Milk Science and Steaming: Building True Microfoam

Learn the milk you are using, run the stretch-then-texture sequence by sound, and judge texture before you ever pour.

Worksheet: Milk choice and behaviour sheet

Record the milk you will learn on and observe how it foams, so you understand your raw material. Start on whole dairy or a barista-edition plant milk for the widest margin.

Milk type and brand (whole dairy / skimmed / barista oat / other)

Fat percentage (if shown)

Barista / professional edition? (yes / no)

Starting temperature (straight from fridge?)

Ease of foaming observed (easy / stiff / splits / watery)

Finish temperature reached when you stopped (C or F)

Taste at that temperature (sweet / flat / scalded-eggy)

Verdict: keep this milk to learn on, or switch?

Exercise: Stretch-then-texture by sound

Steam several small jugs focusing only on the two phases and the sounds they make. Stretch with the tip just under the surface for the first few seconds (gentle tearing), then submerge slightly and spin a silent whirlpool to temperature. Pour each out and assess.

- What sound told you the stretch was right, and what sound told you the tip was too high?

- Roughly how many seconds of stretching gave smooth latte milk versus stiff over-foamed milk?

- When you tapped and swirled the finished jug, did it look glossy and move as one liquid, or separate into foam and liquid?

- At what cue did you stop (too hot to hold / thermometer reading), and did residual heat push it past sweet?

Checklist: Pour-ready milk checklist

- Filled the jug to just below the spout, leaving room to expand
- Purged the wand, then placed the tip just below the surface, off-centre
- Stretched only at the start while milk was cold, for a few seconds
- Transitioned to a deeper tip and a smooth, silent whirlpool
- Stopped at 55 to 65 C, before it became too hot to hold for long
- Shut steam off before lifting the wand, then wiped and purged it
- Tapped the jug to burst large bubbles and swirled until glossy
- Confirmed wet-paint gloss, one-piece movement, and a dull tap before pouring

Worksheet: Milk-fault diagnosis log

Each time the milk comes out wrong, log the symptom and the correction so you stop repeating the same fault. Fill one row per bad jug until faults become rare.

Symptom (big bubbles / stiff dry foam / thin watery / scalded eggy)

What the sound was doing during the steam

Likely cause (too much air / over-stretched / under-textured / too hot)

Correction applied next jug

Did the correction work? (yes / partly / no)

Free Pour: Heart, Rosetta, and Tulip

Drill the three controls, then pour the heart, rosetta, and tulip in sequence, fixing one variable at a time.

Exercise: Height and flow control drill

Before chasing shapes, isolate the two-phase pour. Over a clean brown base, practise pouring high-and-thin to bury milk under the crema, then dropping low-and-fast to float a white disc. Repeat until you can summon white on command.

- From what height did the milk stop leaving white marks and disappear under the crema?

- What changed (jug height, flow, or both) the moment the white started floating on top?

- Which mistake did you catch yourself making, going too low too early or staying too high in phase two?

Exercise: Heart, rosetta, tulip progression

Pour the three foundational patterns in order, spending a full session on each before moving on. Build the brown base the same way every time, then add the move that defines each pattern: hold-and-cut for the heart, wiggle-and-drift for the rosetta, push-and-stack for the tulip.

- Heart: did your blob stay centred while it grew, and was your finishing cut straight through the middle?
- Rosetta: were your wiggle and backward drift synchronised, or did the leaves bunch (too fast) or smear (too high)?
- Tulip: did each new blob push the previous one into a defined petal, or did the layers merge or disconnect?
- For whichever pattern failed most, what single variable (height, flow, movement, or finish) will you change next time?

Worksheet: Pour attempt tracker

Log each pour so you can see your hit rate climb and tie failures to a cause. Fill one row per attempt during a practice session.

Pattern attempted (heart / rosetta / tulip)

Was the base brown clean and the milk glossy? (yes / no)

Result (clean / decent / failed)

Main fault if any (too high / too low / off-centre / merged / crooked cut)

One adjustment for the next attempt

Checklist: Free-pour setup checklist

- Pulled the shot into a wide rounded cup with intact crema
- Swirled or stirred the cup so the crema surface is even
- Swirled the milk jug one last time to keep it glossy
- Tilted the cup toward you to deepen the far side
- Poured the base high and thin until two-thirds full with no white showing
- Dropped the spout to the surface and raised flow to float the white
- Finished with the right move for the pattern and a clean central cut

Etching, Recovery, and a Repeatable Routine

Turn failed pours into etched saves, diagnose any disappointing cup in order, and lock in a logging and practice routine.

Exercise: Etched-save practice

Deliberately make a flat or off-centre pour, then rescue it with a tool and a little contrast. Try at least two saves: a dragged-heart chain from sauce dots, and a spider-web from a chocolate spiral dragged outward.

- Which etched design best disguised the failed pour, and why did it read as deliberate?
- What tool did you use, and did wiping it between strokes give cleaner lines?
- Now that you can rescue a cup, has it changed how willing you are to attempt harder pours?

Exercise: Whole-drink fault trace

Take a latte you are unhappy with and diagnose it in order rather than blaming the pour. Taste the shot alone, check how it ran, inspect the milk, then judge the pour, and write where the true fault was.

- Tasting the espresso alone, was it sour, balanced, or bitter, and what did that tell you to change?

• Did the shot run cleanly or show channelling signs (sputter, one-sided jet)?

• Was the milk genuinely glossy microfoam, or did texture faults explain the bad art?

• After tracing in order, where did the real fault live: shot, milk, or pour?

Checklist: Daily 30-minute practice checklist

- Dial in: pulled two to three shots to land ratio and time, logging each
- Tasted every dial-in shot alone and only proceeded once balanced
- Milk drills: steamed several jugs judging gloss and movement, not patterns
- Picked one pattern for the day and poured many reps of just that one
- Changed only one variable per attempt and noted its effect
- Used a large jug or dark-water practice to avoid wasting full drinks
- Logged the session and set one clear target for next time

Worksheet: Bag changeover starting point

When a new bag arrives, capture its details and a sensible starting grind from your log so you do not dial in blind. Update after your first balanced shot on the new bag.

Roaster and coffee name

Roast date and days off roast today

Roast level (light / medium / dark)

Starting grind setting borrowed from log

First-shot dose, yield, time, and taste

Adjusted grind that landed a balanced shot

Note for next time (ran fast / slow / needed finer / coarser)

Your Action Plan

1. Buy or borrow a 0.1 g gram scale and start weighing dose in and yield out for every shot this week
2. Dial your current bag in to a 1:2 ratio, adjusting only grind until it tastes balanced in roughly 25 to 30 seconds
3. Add WDT-stirring and a level tamp to every prep until channelling disappears from your shots
4. Switch to whole dairy or a barista-edition plant milk and steam ten small jugs focusing only on texture
5. Drill the stretch-then-texture sequence by sound until milk reliably comes out wet-paint glossy
6. Pour twenty hearts over a clean brown base before moving on, perfecting the hold-and-cut finish

7. Progress to the rosetta, synchronising the wiggle and backward drift, then to the layered tulip
8. Learn two etched saves (dragged-heart chain and spider-web) so no failed pour is ever wasted
9. Run the shot-then-milk-then-pour fault checklist out loud on every disappointing cup until it is automatic
10. Keep the dial-in and pour logs daily, and use them to set your starting grind on each new bag

