STRETCHLEARN · WORKBOOK

Lettering for Merchandise — Workbook

This workbook turns the course into a repeatable pipeline for shipping one real lettering design onto products. You will pick a product and process, sketch and vectorise a phrase, lay it out for a curved or awkward surface, build mockups, and export the exact files a print-on-demand shop or screen printer accepts. Work every sheet on one actual phrase so you finish with both a skill and a delivered, shop-ready design pack.

Sketching Lettering That Belongs on a Product

Lock the product, process, and phrase, then sketch a composition with a clear focal word before any vector work.

Worksheet: Product and Process Brief

Decide what you are making and how it will be printed before you draw, because the process is the brief. Fill one row for the design you will carry through the whole workbook.

Phrase / message

Product (tee / mug / tote / hat / other)

Print process (screen / DTG / vinyl / sublimation / embroidery)

Garment or product colours to support

Number of ink/thread colours allowed

Target retail price

Why this process for this product (1 line)

Exercise: Twelve Thumbnails, One Focal Word

Underline the one or two words that carry the meaning, then sketch 6-12 thumbnails about 4 cm wide, each a different arrangement. Squint at them to test contrast.

- Which word is your focal word, and is it clearly the loudest in your favourite thumbnail?
- Which thumbnail can you still read while squinting, and does its silhouette fit your chosen product?
- Are you pairing exactly two styles (a script plus a structured sans), or has it crept to three?

Exercise: Refine and Ink the Winner

Scale your chosen thumbnail to about 15-20 cm wide and ink it cleanly: thick downstrokes, thin upstrokes, even spacing, confident baseline. Leave deliberate gaps where strokes cross.

• Are all your thick downstrokes the same width when you measure them with the pen?

• Did you keep upstrokes thin (lifted) so it reads as lettering, not handwriting?

• Is the inked image high-contrast black-on-white at 300 DPI and free of pencil smudges?

Checklist: Sketch-Stage Readiness

[ ] Product and print process chosen and written down
[ ] Garment/product colours and colour count decided
[ ] Focal word identified and made dominant
[ ] 6-12 thumbnails sketched and one or two chosen
[ ] Only two type styles in play
[ ] Winner refined to full size and inked at consistent weight
[ ] Clean 300 DPI black-on-white scan or export saved

Vectorising and Building Clean Type

Trace the ink to vector, clean the paths and overlaps, and assemble the focal word with a licensed supporting typeface into one lockup.

Worksheet: Trace Settings Log

Record the trace settings you landed on so you can repeat them next time. Use Illustrator Image Trace or Inkscape Trace Bitmap on your 300 DPI inked PNG.

Tool (Illustrator / Inkscape)

Preset used (e.g. Black and White Logo / Brightness Cutoff)

Threshold value

Paths / Smooth setting

Corners value

Snap curves to lines? (Y/N)

Approx anchor points per letter after Expand

Exercise: Simplify, Smooth, Unite

Clean the fresh trace in three passes: simplify anchor points, smooth the big curves by hand, then unite all overlapping strokes into one solid shape. Zoom to 800 percent to check.

• After Simplify, does each letter have a handful of anchors rather than dozens?

• Are the long curves (S, O, swashes) controlled by two or three aligned points, with no wobble?

• After Unite, are the counters (holes in a, e, o) still open and is there no hidden seam where strokes crossed?

Worksheet: Type Pairing and License Check

Choose the supporting typeface for any words you are not hand-lettering, and confirm it is legal to sell on products. Record the license so you can prove it later.

Hand-lettered focal word (your drawing)

Supporting typeface name

Font source (Google Fonts / foundry / self-drawn)

License type (Open Font License / purchased merch license / own)

Merch/products use explicitly allowed? (Y/N)

Converted supporting type to outlines? (Y/N)

Editable copy with live text saved separately? (Y/N)

Checklist: Vector Readiness Pass

- [ ] Original raster image deleted, only vectors remain
- [ ] Anchor points simplified to the fewest that hold the shape
- [ ] Big curves smoothed, no leftover bumps at 800 percent
- [ ] All overlaps united into one clean silhouette
- [ ] Counters open, no filled-in holes
- [ ] Supporting typeface confirmed merch-licensed
- [ ] All typeset words converted to outlines
- [ ] Editable live-text master archived separately

Laying Out Type for Curved and Awkward Surfaces

Size and place the lockup for the real geometry of your product, respecting print zones, the mug wrap, and embroidery limits.

Worksheet: Placement and Size Sheet

Pull the exact print area from your supplier's spec page and decide your art size and position on the body, not on the full canvas. Fill the rows for your product.

Supplier print area (W x H, inches)

Placement (full front / left chest / back / mug wrap / hat front / tote panel)

Planned art width (inches)

Distance below collar or from key edge (inches)

Pixels at 300 DPI for that width

Light or outlined variant needed for dark product? (Y/N)

Clear of seams / handle / pocket / fold? (Y/N)

Exercise: Wrap or Arch the Baseline

If your product curves (mug or hat front), test the layout for the curve. Centre the focal word on a mug wrap, or gently arch hat-front lettering so it reads level once applied.

• On a mug, is the focal word centred to face the drinker, with important words out of the outer thirds?

• On a hat, is every letter at least 5 mm tall so embroidery can form it, and the design under about 4.5 by 2.25 inches?

• Did a subtle arch read level on the curve, or did you over-bend it into a rainbow?

Worksheet: Surface Constraint Notes

Record the limits of your chosen surface so the design respects them. Different products break in different ways; note yours.

Surface texture (smooth cotton / coarse canvas / coated mug / curved cap)

Thinnest stroke that will survive (mm)

Minimum letter height for this process (mm)

White ink available? (Y/N — note for sublimation)

Gradients possible? (Y/N)

Handle / seam / pocket clearance respected? (Y/N)

Baseline straight or arched for this surface?

Checklist: Surface Layout Pass

[ ] Art sized to the body (typically 9-11 inch chest, not full area)
[ ] Placement matches supplier zone and feels right on a sample garment
[ ] Mug focal word centred and clear of handle and outer thirds
[ ] Hat lettering simplified to solid shapes, letters over 5 mm
[ ] Tote art inside centre panel, clear of seams and fold
[ ] Hairline strokes thickened for coarse or textured surfaces
[ ] Baseline arched only where the surface bows, and only subtly

Mockups, File Prep, and Shipping to the Printer

Present the design on realistic mockups at the true print size, prep colour and resolution for the process, and export a clean shop-ready delivery pack.

Exercise: Mock It Up at the Real Size

Build at least two mockups using a generator (Printful/Printify, Placeit, or a Photoshop smart-object PSD), placing the art at the exact print size and position it will print.

• Does the mockup show the art at the true print width and centred position, not an idealised one?

• Have you shown at least two colourways or two products so a buyer has a way to say yes?

• Are your mockups consistent in lighting and crop so the range looks like one brand?

Worksheet: Print-Process Prep Sheet

Set the colour mode, resolution, and process-specific adjustments for your chosen process, then record them so the printer knows exactly what they received.

Colour mode (RGB sRGB / CMYK / spot)

Pantone (PMS) numbers if screen printing

Number of colours / screens

Resolution (DPI) and pixel size at print width

White underbase needed (dark DTG)? (Y/N)

Thinnest line after thickening (mm)

Gaps between letters widened to avoid choke? (Y/N)

Exercise: Export the File Set

Export the formats your process needs from the clean vector: transparent 300 DPI PNG, SVG, and a vector PDF/AI handoff. Name each file clearly with design, colourway, and size.

• Is the PNG background truly transparent (not white) and at final print size at 300 DPI?

• Did you export an SVG for any vinyl or laser use, and a vector PDF with fonts outlined for the print shop?

• For embroidery, have you arranged digitising to a DST file rather than exporting one yourself?

Checklist: Delivery Pack Spec

[ ] Transparent PNG, 300 DPI, final print size
[ ] SVG vector for vinyl/laser if needed
[ ] Vector PDF or AI/EPS handoff with type outlined
[ ] DST/PES stitch file arranged for embroidery (via digitiser)
[ ] Colours and Pantone numbers documented
[ ] Files named with design, colourway, and size
[ ] One-line spec note (print size, colours, process) included

[ ] Editable live-text master archived separately

Your Action Plan

1. Choose your product and print process, and write the colour count and target price in the Product and Process Brief.
2. Underline the focal word, sketch 6-12 thumbnails, and pick one or two that read while squinting.
3. Refine the winner to full size and ink it cleanly at consistent weight; scan or export at 300 DPI black-on-white.
4. Trace it to vector in Illustrator or Inkscape, tuning Threshold and smoothing, then Expand to real paths.
5. Simplify anchors, smooth the big curves, and Unite all overlaps into one solid shape with open counters.
6. Add a merch-licensed supporting typeface, assemble the lockup, and convert all type to outlines (keep a live-text master).
7. Pull the supplier print area, size the art to the body, and place it for the surface (centre a mug wrap, arch a hat front).
8. Build at least two mockups at the true print size and position, on two colourways or products.
9. Set the colour mode and resolution for the process, thicken hairlines, and assign Pantone numbers if screen printing.
10. Export the file set (transparent 300 DPI PNG, SVG, vector PDF), name everything clearly, add a one-line spec, and send the pack.