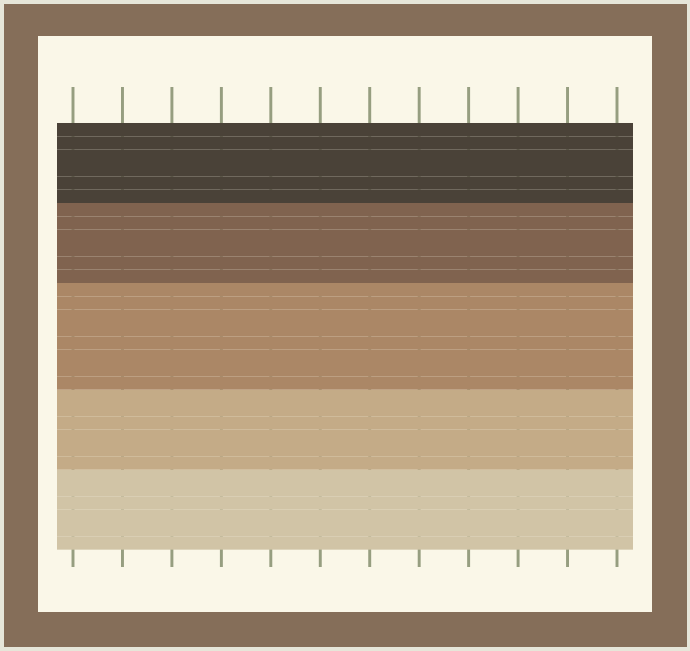
STEADLEAF PRESS

MAKE / ORIGINAL FREE DIGITAL GUIDE / F094

WEAVE A SMALL GRADIENT PATCH

on a Frame Loom



12 VERTICAL WARPS / 32 CROSSWISE PICKS / FIVE SHADES

A6 - B6 - C8 - D6 - E6 (stepped light-to-dark)

On-loom educational swatch; no physical textile testing.

Edition: Steadleaf Press original FREE MAKE adult digital guide. Independent technical/editorial review final verdict PASS; no real physical weaving or material-strength trials performed. It has not been physically woven, fit-tested, size-calibrated, rendered to actual paper, durability-tested, or independently verified on a real frame loom. The published digital pattern will be an instructional design, not a tested textile product.

A gradient made one pick at a time

A gradient can be studied as a deliberate five-band progression from light to dark without promising a photographic smooth fade. On a pre-slotted, small tabletop frame loom, first make twelve visible straight vertical warp spans. Work thirty-two horizontal weft passes, called picks, using five similar-weight yarn colours marked A through E, arranged from palest to deepest. Every pick alternates over one warp / under one warp, and the next pick passes oppositely over/under each vertical warp thread. Only the weft colour changes; the plain-weave interlacement and loom orientation stay consistent.

The original transition plan uses five even-length bands, so the colour changes occur after picks 6, 12, 20 and 26. This is a stepped gradient study-visible stripes made progressively darker. If five matching-weight shades are unavailable, select another five compatible yarns and record what you used. Do not claim a blended gradient when colours are not visually gradual.

Colour band | Position in value scale | Weft picks inclusive | Pick count

A | very light | 1-6 | 6

B | light-medium | 7-12 | 6

C | middle | 13-20 | 8

D | dark-medium | 21-26 | 6

E | dark | 27-32 | 6

Total | five graduated shades | 1-32 | 32

The arithmetic is 6 + 6 + 8 + 6 + 6 = 32 picks. Each pick must cross the same twelve individual front-facing warp spans, numbered 1 through 12 from left to right. A pass from left to right is one pick; the return pass from right to left is another. The width is controlled by warp position, not by how tightly the weft is dragged. The finished height depends on yarn size and beat-in density; neither a finished width nor an exact height is guaranteed.

What this makes: a small display swatch that remains mounted on its loom for observation and photography. This guide does not teach removing the sample from the frame or finishing cut warp ends; removing an unfinished panel without securing the warp can cause it to unravel. It is not intended as a coaster, pot holder, clothing piece, skin-contact product, safety item, toy or usable fabric under load.

Materials and a frame with appropriate warp positions

Use one small, stable purpose-made frame loom with smooth edges and at least twelve corresponding top/bottom warp slots, pegs or grooves. A useful example has approximately 18-22 cm of clear working height and 12 evenly spaced front warp points about 8 mm apart (roughly 8.8 cm across between first and last points). The precise dimensions vary by loom; use its manufacturer guidance to mount yarn. Do not cut grooves into a glass picture frame, drill a domestic frame, use exposed sharp nails, or improvise hooks or heavy attachments.

Prepare smooth, relatively non-stretch warp cotton, with a generous starting allowance of roughly 5-6 metres for a suitably small frame if you are winding an uninterrupted path; the actual amount needed depends on whether the loom runs yarn across its back and on frame dimensions. You can instead use an already warped commercial loom that shows exactly twelve front-facing vertical warp spans. Take five similar-thickness clean, dry weft yarns, colours A, B, C, D, E from lightest to darkest. Each shade must have enough yarn for its planned six or eight crosswise passes plus several centimetres of starting and ending tails. If pre-cutting weft, allow generously more than the number of passes multiplied by woven width; use a small loose ball if possible to avoid estimating shortage.

Tools: blunt large-eye weaving needle or short safe shuttle, a small non-sharp weaving comb or fingers for light packing, a physical ruler, a pencil and two printable records. Use appropriately sized scissors on a protected tabletop, out of the path of hands. Work seated or at a comfortable low table with the loom supported flat or steadily tilted, not held overhead or mounted on a swinging stand. Keep all long strings, loose yarn ends, small tools and offcuts away from children and pets.

Warping orientation. Face the working FRONT of the frame. If it has twelve corresponding grooves, arrange one continuous warp yarn to create twelve straight vertical visible FRONT spans-the rest of the path crosses the rear between subsequent aligned positions as the loom design permits. Secure the start and end on the back or prescribed anchors according to the frame instructions, never by stapling, knotting around exposed sharp hardware, or crushing the front yarn under a clip. You are counting twelve FRONT warp spans, not twelve windings on the rear. Confirm each front span is separately visible and has similar mild hand tension. If you cannot get twelve matching front spans without unsafe improvisation, stop and use a purpose-made loom or a pre-warped frame. Tension is only enough to weave; no string is for lifting or supporting the loom.

Plain weave, count, and colour joins

Pattern A - the first two picks

Look at the twelve warp spans left-to-right and number them 1...12. For pick 1, carry colour A with a blunt weaving needle from the LEFT edge to the RIGHT. Cross OVER warp 1, UNDER warp 2, OVER warp 3, continuing alternation, ending UNDER warp 12. Leave at least 7-10 cm of starting tail at the left edge for

later neat finishing. A thin, diagonal arc of weft slack before pressing down helps the edge strands remain upright; do not pull the first edge inward.

For pick 2, turn the same weft yarn gently around the outside of rightmost warp 12 and return RIGHT to LEFT. Where pick 1 was UNDER warp 12, pick 2 must be OVER warp 12, then UNDER warp 11, continuing alternation so it finishes UNDER warp 1. This creates the opposite over/under relationship on every vertical warp. Repeat the two-pick pattern: odd picks go left-to-right over warp 1 first; even picks go right-to-left over warp 12 first. With twelve warp threads, the turn at each edge remains a single gentle wrap, never a knot around the outside warp.

Pattern B - five successive colour bands, four joins

Work A on picks 1-6. Pick 6 ends at the LEFT. Leave roughly 7-10 cm of the old colour A at that left edge before cutting, then begin B on pick 7 from LEFT, also leaving a 7-10 cm tail. Continue B 7-12, C 13-20, D 21-26, E 27-32 with the same odd/even over-under parity. Because every colour band has an even number of picks, each colour change is made on the LEFT edge; the next shade always begins there. Do not knot different colours together at the visible edge or tightly stack tails into a lump.

To keep the study secure while mounted, gently thread each loose colour-change tail back through several existing crosswise weft paths near the outer edge, using the blunt needle, avoiding visible bulky knots or a pulled-in selvedge. If the space is too tight to tuck a tail reliably, leave it long and visible for the record rather than cutting flush. This is decorative practice finishing, not a tested method for removing the textile from its frame or surviving washing or wear.

A useful caution about density

Use the same gentle, consistent packing motion for every row. Do not hammer all five colour bands down as if density were a fixed measurement. A row made from a thicker yarn may cover more height even if you count it as one pick. When a yarn is too fuzzy or different in diameter, record that difference. The original pattern counts picks and colour transitions; it does not promise exact patch dimensions, colour blending, protective thermal properties or a stable loose textile.

Step-by-step instructions

1. Select a safe tabletop frame loom

Choose a purpose-made, smooth-edged frame loom with at least twelve matched top/bottom warp locations and a stable working area. Work away from pets, children, flames and food. Check for damaged pegs, splinters, sharp nails or loose frame pieces before touching yarn. Do not modify a household glass or picture frame to substitute for a loom.

2. Arrange the five shades in light-to-dark order

Select five clean, dry, reasonably similar-weight weft yarns. Label them A lightest, B, C, D, E darkest on the physical record sheet, including actual yarn names or fibre content if known. The visual gradient depends on relative shade and illumination; a photograph or display may look different. Do not imply dye permanence or colourfastness.

3. Prepare twelve front warp spans

If the frame is already warped with twelve front-facing vertical lengths, keep that stable arrangement. Otherwise use the loom’s prescribed continuous-warp route through corresponding top and bottom slots until the FRONT shows exactly twelve approximately parallel spans, numbered left-to-right 1 through 12. Keep starting and finishing yarn tails anchored on the frame’s back where its maker recommends. Stop if the frame slips or sharp edges abrade the warp.

4. Check mild, even tension and spacing

With the loom resting securely on a tabletop, compare each of the twelve warp strands by a gentle fingertip tap, not a hard pull. The spans should appear approximately straight and aligned. The example spacing is about 8 mm between adjacent warp locations, giving 11 gaps across twelve spans; the frame may use a different spacing. Never force spacing with fingers or tighten a weak frame under tension.

5. Number the vertical strands for the chart

Mark 1...12 on paper aligned beneath or beside the loom, from left to right; do not write ink on the yarn or loom if it might stain. Place the printed Pattern 1 beside you. From here on, pick 1 starts on LEFT and travels right, pick 2 comes back from RIGHT. Count a completed full-width traversal only once.

6. Thread A and weave pick 1

Feed A through a blunt needle, leaving at least 7-10 cm free at the left border. Begin pick 1 over warp 1 and under warp 2, continuing over/under until the right edge ends under warp 12. Let the weft lie in a gentle arc across the warp rather than pulling tightly across its width. Gently press the completed row toward the bottom start area.

7. Turn and weave pick 2 in the opposite interlacement

At the right edge, bring A around outside warp 12 without a tight tug. Return toward the LEFT over warp 12, under 11, and continue alternating until the pass finishes under warp 1. Check that each warp crossed from above in pick 1 is crossed from below in pick 2. This is the key structural check for plain weave.

8. Complete the first light band, picks 3-6

Work picks 3,4,5,6 in the same two-row alternation: odd from LEFT over warp 1, even from RIGHT over warp 12. Beat each pick down lightly and maintain straight edges. Stop at pick 6, ending LEFT. Tick off exactly six A picks on Record 1, not six back-and-forth pairs.

9. Change to B for picks 7-12

Leave a 7-10 cm A tail at the left edge and cut A, then introduce B from LEFT on pick 7, leaving its own 7-10 cm tail. Keep the same interlacement parity; B starts over warp 1. Complete B picks 7-12 for six B picks. Tuck tails gently later while the patch is mounted; do not make a bulky knot at the colour join.

10. Fill the centre with C, picks 13-20

At the LEFT edge after pick 12, set aside B with a long tail and introduce middle shade C. Weave eight C picks, numbered 13-20, alternating passage directions and over/under placement every pick. C contributes more rows than either adjacent shade; that broad middle band is intentional in the example chart. Keep tension gentle.

11. Weave D, picks 21-26

After pick 20 ends LEFT, introduce D, the dark-medium shade, with a loose starting tail. Weave exactly six D picks on picks 21-26, checking each one as a full crosswise traversal. Avoid squeezing the previous middle band as you pack the new colour. Keep the edges straight rather than tight.

12. Finish with E, picks 27-32

After pick 26 ends LEFT, introduce the darkest shade E and weave six E picks to reach pick 32. This last even pick returns to the LEFT. Leave about 7-10 cm of ending E tail for inspection and gentle tucking. The colour count should now be A6 / B6 / C8 / D6 / E6 = 32 full-width picks, with four transitions after 6,12,20,26.

13. Tuck available colour tails while leaving warp secured

With the patch still ON the loom, use a blunt needle to guide each loose beginning, change and ending tail through a few adjacent weft paths near the border. Avoid tugging the edge warp inward, knotting bulky joins, or shortening the tails to nothing. If a tail cannot be seated without distorting the small fabric, leave it accessible instead of claiming a secure finish. Do not remove or cut this unfinished sample from the frame: the guide does not supply an off-loom warp-termination method.

14. Read the gradient and preserve the mounted swatch

Fill in both records: five yarn shades, warp count, pick count for every band, transition points, edge shape, any loose tails and deviations. Observe whether the colour rises from light to dark in five stepped bands rather than a perfectly smooth colour blur. Photograph the finished sample on its flat loom only if convenient, leave the small swatch mounted, and keep it dry and inaccessible to children and pets. Follow the actual fibre manufacturer’s care information; no wet setting, washing, finished-size or physical durability test has been done.

Fix, care and preserve

Two adjacent picks show the same over/under route

Stop and compare the latest two rows. If an odd row starts OVER warp 1, the following even return must start OVER warp 12 because the previous odd row ended UNDER warp 12. Undo only the incorrect newest row and redo it rather than packing it down to hide the missed crossing.

The patch narrows toward the centre

Your weft is probably being pulled tight at the turning edges. Unpick the affected row if accessible, leave a small diagonal or gentle arc of slack and lay it down with a light comb. Never pull outer warp strands inward to make a tidy-looking photograph.

The gradient seems to have an abrupt jump

This is a five-step shade study. Confirm that A is palest and E darkest and that B, C and D are genuinely intermediate shades when compared in the same light. If two colours are not gradual, record the visual gap. This pattern intentionally uses solid bands; it does not claim optical mixing or smooth blended colour.

A yarn tail pulls the left edge into a bump

Release the latest join and re-seat it with a loose 7-10 cm tail. Use a blunt needle to tuck it through several nearby existing weft paths only while the fabric remains supported. Do not tie a hard knot at the left selvedge, cut the tail flush, or claim the mounted sample is stable when removed.

A thick shade changes the band’s height

Equal pick counts do not necessarily create equal heights with yarn of different thickness. For the example

choose fairly similar yarn sizes and use a gentle, repeatable packing motion; record the density variation rather than overstating exact dimensions.

The warp slackens or a peg turns sharp

Stop if a warp span slips or snags or if hardware becomes loose. Restore using only the frame manufacturer's safe instructions or return to a pre-warped frame. Do not insert bare nails, glass edges, hard pulling weights, powered tools or sharp wires to force the pattern to finish.

Storage and appropriate use

Leave this educational patch mounted and dry on its stable frame. Avoid water, steam and heat unless the yarn maker specifically advises them; colour may transfer and some fibres change shape when wet. Do not call the patch a coaster, protective textile, toy, hanging fixture, or durable finished fabric. Any unmounted fabric would need separate warp finishing and testing not provided here.

Pattern 1 - Thirty-two pick plain-weave and gradient chart

The front of the loom has 12 warp spans numbered 1-12 left to right. Work 32 full-width weft picks in the order shown below. Odd picks from LEFT begin OVER warp 1; even picks from RIGHT begin OVER warp 12; the rest alternate over and under each warp. Each colour band uses the same parity; changing shade does not restart counting from pick 1.

Pick range | Shade | Individual pick numbers | Picks

1-6 | A - very light | 1 2 3 4 5 6 | 6

7-12 | B - light-mid | 7 8 9 10 11 12 | 6

13-20 | C - middle | 13 14 15 16 17 18 19 20 | 8

21-26 | D - dark-mid | 21 22 23 24 25 26 | 6

27-32 | E - deep | 27 28 29 30 31 32 | 6

TOTAL | Five shades | 32 full-width traversals | 32

Pattern 2 - Changing shade without squeezing the edges

A colour change is made at the LEFT edge after the previous even pick. Keep the old colour's 7-10 cm tail visible and enter the next colour at the same left edge, also with a loose tail. Do not tie them into a prominent

surface knot. Each new odd pick starts over warp 1; the next even pick returns from right, beginning over warp 12. Over/under parity remains global over all 32 picks. Gently tidy tails through nearby woven paths on the mounted sample only. Never cut the warp or remove this educational patch as part of the present pattern.

Record 1 - Pick count and weft-color transitions

Band | Shade / yarn and fibre | Target picks | Actual picks | Boundary after pick

A | _____ | 6 | ____ | 6

B | _____ | 6 | ____ | 12

C | _____ | 8 | ____ | 20

D | _____ | 6 | ____ | 26

E | _____ | 6 | ____ | 32 / finish

TOTAL | Five shades | 32 | ____ |

Warp spans checked: ____ / 12.

Did odd picks start OVER warp 1? ____.

Did even picks start OVER warp 12? ____.

Any replacement yarn or skipped pick? _____.

Record 2 - Loom and mounted swatch review

[ ] Stable purpose-made smooth-edged frame loom; no hazardous nails or glass.

[ ] Exactly twelve visible aligned front warp spans checked.

[ ] Five shade yarns ordered light A to deep E in similar thickness.

[ ] One full traversal counted as one pick, even on return passes.

[ ] All odd picks began over leftmost warp 1.

[ ] All even picks began over rightmost warp 12.

[ ] Changes followed picks 6, 12, 20 and 26, always at LEFT.

[ ] Warp edges stayed reasonably straight; weft was not pulled tight.

[ ] Loose weft ends handled gently or intentionally left accessible.

[ ] Swatch remains on the frame; no warp threads cut.

[ ] Scissors, loose yarn and frame stored away from children and pets.

Approximate mounted woven width (actual): _____ cm.

Approximate mounted woven height (actual): _____ cm.

Which transition looked most gradual? _____.

Edge bowing, colour mismatch, yarn bulk, or loose tails: _____.

Next mounted practice study: _____.

Technical reference and originality

This is a new original Steadleaf Press 12-warp / 32-pick / five-colour stepped-gradient frame-loom study with its own original transition chart, printable counting log, mounting/care checklist and vector instructional diagrams. Plain-weave parity, warp/weft terminology and gentle selvedge technique were cross-checked against these publicly available educational references for factual grounding only; no source chart, diagram, photography or prose is copied:

- Museum of Craft and Design (San Francisco), Welcome to Weaving: https://sfmcd.org/project/welcome-to-weaving/

- Gist Yarn, Basic Weave Structures: Plain Weave: https://www.gistyarn.com/blogs/how-to-weave/basic-weave-structures-plain-weave

- Sally C Garner, Loom Instructions, selvedge tips: https://www.sallycgarner.com/loom-instructions

- Gist Yarn, Selvedge Management: Tips & Tricks for Weft Color Changes: https://www.gistyarn.com/blogs/how-to-weave/selvedge-management-tips-tricks-for-weft-color-changes

Digital-only verification: No actual frame loom, warp tension, physical weaving, fiber contamination, physical hand injury, stitch security, finished width/height, shrinkage, wet treatment, printing-scale, durability, structural strength or child/pet safety testing is conducted by the publisher. This is an educational decorative mounted swatch, not a functional textile or rated product.

Five-shade weft-colour transition chart

Each cell = ONE complete full-width weft pick, not a pair.



6 + 6 + 8 + 6 + 6 = 32 picks; all four joins on LEFT.

Chart is an original visual count guide, not a print-scale loom.

Plain-weave crossings: one pick, then its reverse

12 front warp spans numbered LEFT 1...12 RIGHT.



Pick 1: LEFT to RIGHT, starts OVER warp 1



Pick 2: RIGHT to LEFT, starts OVER warp 12

Odd pick: O U O U O U O U O U O U (left -> right)

Even pick: U O U O U O U O U O U O (left -> right)

Adjacent rows are opposites on EVERY warp. Keep edges relaxed.

After an even pick, old shade ends LEFT; new shade starts LEFT.

Leave 7-10cm weft tails; tuck gently while swatch is mounted.

NEVER remove the swatch or cut warps in this learning project.

Shade bands and actual pick counts

Frame / warp type: _____ Date: _____

Band	Yarn/fibre	Target	Actual / join
A / pale		6	_____
B / light-mid		6	_____
C / mid		8	_____
D / dark-mid		6	_____
E / dark		6	_____
TOTAL		32	_____

FRONT warp spans: ___ / 12; joins after 6 / 12 / 20 / 26.

Parity issue or missing pick: _____

Mounted-patch and loom safety checklist

- [ ] Purpose-made smooth frame with no dangerous sharp hardware
- [ ] Twelve evenly positioned FRONT warp strands checked
- [ ] Five compatible-weight shades in graduated order
- [ ] All 32 picks individually counted in five bands
- [ ] Odd picks begin OVER leftmost warp 1
- [ ] Even picks begin OVER rightmost warp 12
- [ ] Light, controlled beating; edges not drawn in
- [ ] Colour tails gently tucked or left accessible
- [ ] Patch remains ON frame, no cut or unbound warps
- [ ] No physical strength, laundering or dimensional claim
- [ ] Loose yarn and scissors stored away from children / pets

Observed width, height, and shade progression: _____