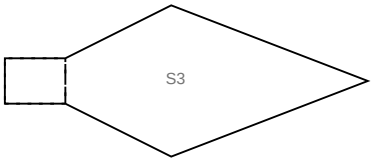
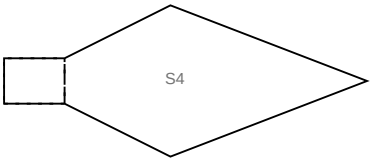
Columbine - Five Spurred Pockets

columbine / 1.0.0 / A4 / Template page 1

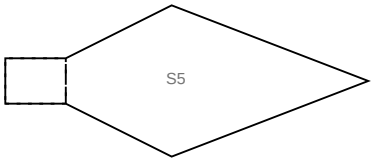
S3 | cut 1
48.00 x 20.00 mm



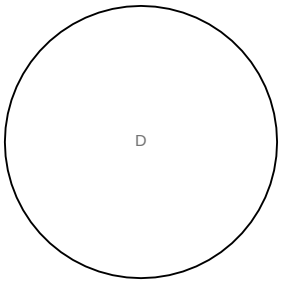
S4 | cut 1
48.00 x 20.00 mm



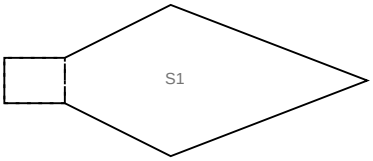
S5 | cut 1
48.00 x 20.00 mm



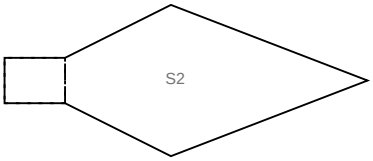
D | cut 1
36.00 x 36.00 mm



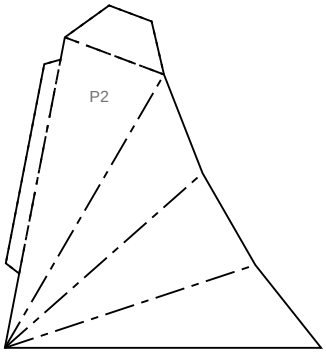
S1 | cut 1
48.00 x 20.00 mm



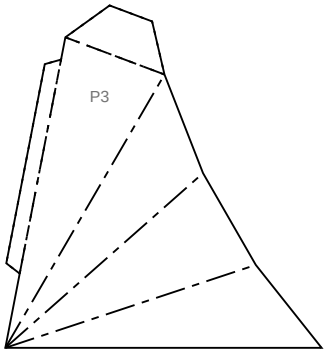
S2 | cut 1
48.00 x 20.00 mm



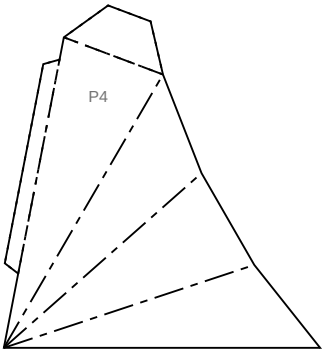
P2 | cut 1
41.82 x 45.27 mm



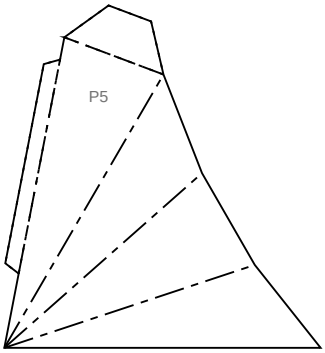
P3 | cut 1
41.82 x 45.27 mm



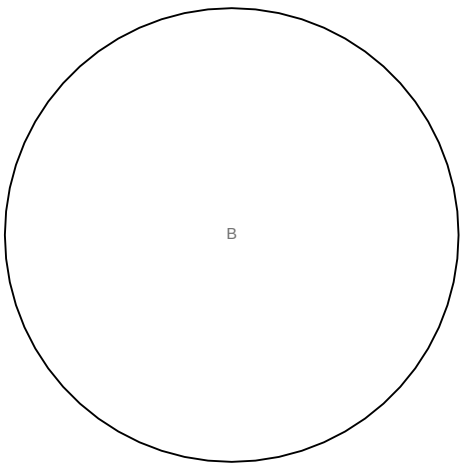
P4 | cut 1
41.82 x 45.27 mm



P5 | cut 1
41.82 x 45.27 mm



B | cut 1
60.00 x 60.00 mm



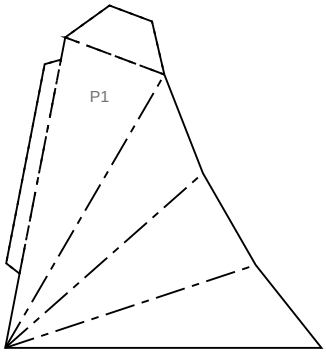
R1 | cut 1
12.00 x 56.00 mm



R2 | cut 1
12.00 x 56.00 mm



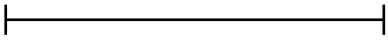
P1 | cut 1
41.82 x 45.27 mm



C | cut 1
14.47 x 15.22 mm



Solid: cut | Dashed: valley | Dash-dot: mountain | Dotted: glue



50 mm calibration

Print at 100% / Actual size. Do not fit to page. Original paper craft template.

snipfold.com/work/columbine

Columbine - Five Spurred Pockets

columbine / 1.0.0 / A4 / Assembly instructions

Finished size: 100.6 x 105.8 x 45.8 mm (width x depth x height)

Materials: 140-160 gsm pale lilac paper for P1-P5; 160-180 gsm violet paper for S1-S5 and D; 250-300 gsm green card for B, R1 and R2; 160 gsm golden paper for C; PVA glue; Scissors or craft knife and cutting mat; Millimetre ruler, blunt scoring tool and protractor; Tweezers and small clips for holding glue seams

Step-by-step guide with a 3D model: https://snipfold.com/work/columbine. Not yet test-built in paper by SnipFold: measurements come from the digital model, so check the fit as you go.

Original faceted columbine interpretation: five independent four-sided spurred pockets, not a shared bell or recolored radial petal stack. Each 14 x 14 mm mouth remains open.

Each spur apex is 32 mm below its mouth and 19 mm radially outside its mouth center; apex radius 42 mm, mouth center radius 23 mm. Straight pyramidal spurs replace botanical curved nectar spurs.

All cut polygons, support flanges, seam laps and petal aprons have exact flat correspondence and rigid-face meshes. No smooth double-curvature, stretching, hidden wire, or unlisted paper is used.

B is a 60 mm display plinth. R1 and R2 are visible artificial card supports, not botanical stems. D is a 36 mm head disk at height 40 mm. The golden star simplifies the central stamens.

Seam laps have 2 mm perpendicular depth, a 10 mm apex setback and a 3 mm mouth setback. The last 10 mm of the spur is an unglued meeting edge: not a liquid-tight pocket. Handle by the plinth, not the pointed spurs.

Glue contacts are ideal zero-thickness surfaces; small sepal/center offsets indicate layers only.

Part inventory (cut each instance once):

B: Round display plinth

R1: Head support bracket 1

R2: Head support bracket 2

D: Flower mounting disk

P1: Spur pocket 1

P2: Spur pocket 2

P3: Spur pocket 3

P4: Spur pocket 4

P5: Spur pocket 5

S1: Pointed sepal 1

S2: Pointed sepal 2

S3: Pointed sepal 3

S4: Pointed sepal 4

S5: Pointed sepal 5

C: Golden central star

1. Print, cut and score fifteen pieces [B, R1, R2, D, P1, P2, P3, P4, P5, S1, S2, S3, S4, S5, C]: Print at 100% actual size and check the 50 mm ruler. Cut B, R1-R2, D, P1-P5, S1-S5 and C once each. Keep the narrow lap and tapered mouth apron on every pocket. Score only the marked folds, including the short seam-tab hinge. Do not cut along folds or score mesh diagonals.

2. Build the display support [B, R1, R2]: Fold each R strip at 8 and 48 mm from its short end: both end flanges must point to the same side of the upright 40 mm wall, each at 90 degrees. Each flange is 12 x 8 mm. Center B on the table; set R1 wall 8 mm left of

center and R2 wall 8 mm right of center, parallel and centered front-to-back. Glue the bottom flanges outward onto B: they occupy 8-16 mm left/right of center and 6 mm each side of the front-back centerline. Hold square until dry for at least 20 minutes.

3. Attach the head platform [D, R1, R2]: Glue D centered above B onto the two upper 12 x 8 mm flanges. D underside is 40 mm above B; its center must be directly above the plinth center. Both top flanges point outward and sit entirely beneath D. Press above each flange, not the unsupported disk edge. Let the support dry before loading it.

4. Mark the alternating positions [D]: On D mark its center lightly in pencil. Use a protractor to mark five petal rays at 0, 72, 144, 216 and 288 degrees. Mark sepal rays halfway between at 36, 108, 180, 252 and 324 degrees. Measure all radial distances from this center. No holes or extra cuts are needed.

5. Close five independent spur pockets [P1, P2, P3, P4, P5]: On each P net, the common pointed vertex becomes the spur tip. Mountain-fold the three long internal rays, bringing the two free long edges together to form a four-sided taper. Fold the small seam lap inward under the opposite first triangular face and glue the full marked 2 mm-wide lap. Match the apex and mouth endpoints of the 41.82 mm closing edges without overlapping the main faces. The lap begins 10 mm from the apex and ends 3 mm before the mouth. Use tweezers through the open mouth; keep all four 14 mm rim edges unglued. Adjust until the mouth is a 14 x 14 mm square, then let the seam dry. No pocket connects to another pocket.

6. Mount the five spurred petals [P1, P2, P3, P4, P5, D]: Fold each tapered mouth apron inward toward the flower center until it is horizontal when the square mouth is horizontal. The apron is 6 mm deep, 14 mm wide at its hinge and 6 mm wide at its inner edge. Glue its reverse onto D centered on one petal ray: inner edge at radius 10 mm, hinge at radius 16 mm. Thus each mouth extends outward from radius 16 to 30 mm at height 40 mm; its spur points outward/down to radius 42 mm and height 8 mm. Seat P1-P5 successively on the five 72-degree rays. Keep the mouths open and the spurs clear of the plinth. Hold each apron flat until tacky.

7. Attach the five alternating sepals [S1, S2, S3, S4, S5, D]: Valley-fold each S blade upward 8 degrees from its flat rectangular root (172-degree included angle). Glue only the 8 mm long x 6 mm wide root on top of D centered on a halfway sepal ray, inner root edge at radius 8 mm and hinge at radius 16 mm. The blade points outward between neighboring petal mouths and rises gently; do not curl it. Match S1-S5 to the five halfway rays. Leave all pointed blades free.

8. Finish the golden center and dry [C, D, B]: Apply glue to the marked 6 mm diameter area on C underside and center C on D. Keep its five gold points flat; this is a simplified stamen emblem, not separate hidden stamens. Leave the flower on B overnight to cure. Lift only by the plinth. Check that all five mouths remain separate and open and all five spur tips clear the table by about 8 mm.