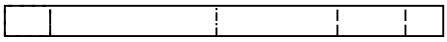
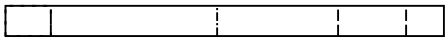
Spider Chrysanthemum

chrysanthemum / 1.0.0 / Letter / Template page 1

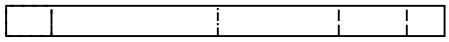
M05 | cut 1
58.00 x 4.00 mm



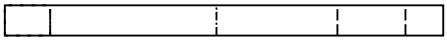
M06 | cut 1
58.00 x 4.00 mm



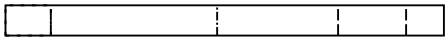
M07 | cut 1
58.00 x 4.00 mm



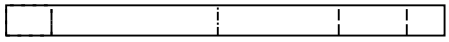
M02 | cut 1
58.00 x 4.00 mm



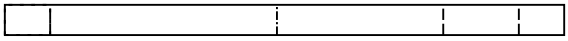
M03 | cut 1
58.00 x 4.00 mm



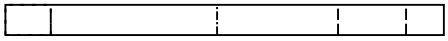
M04 | cut 1
58.00 x 4.00 mm



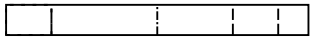
O16 | cut 1
74.00 x 4.00 mm



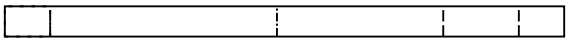
M01 | cut 1
58.00 x 4.00 mm



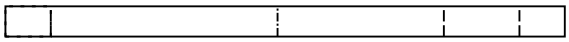
I02 | cut 1
40.00 x 4.00 mm



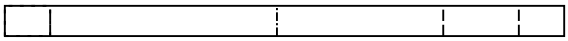
O14 | cut 1
74.00 x 4.00 mm



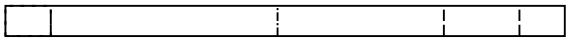
O15 | cut 1
74.00 x 4.00 mm



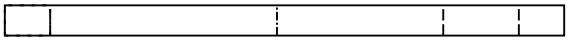
O12 | cut 1
74.00 x 4.00 mm



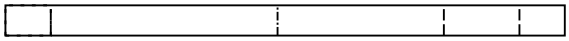
O13 | cut 1
74.00 x 4.00 mm



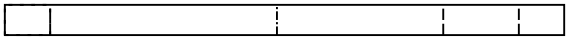
O10 | cut 1
74.00 x 4.00 mm



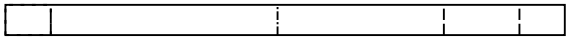
O11 | cut 1
74.00 x 4.00 mm



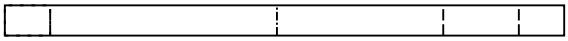
O08 | cut 1
74.00 x 4.00 mm



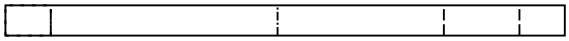
O09 | cut 1
74.00 x 4.00 mm



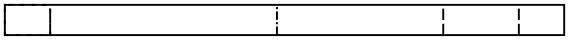
O06 | cut 1
74.00 x 4.00 mm



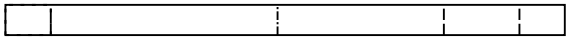
O07 | cut 1
74.00 x 4.00 mm



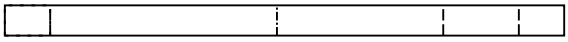
O04 | cut 1
74.00 x 4.00 mm



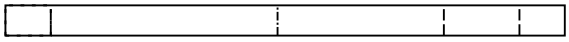
O05 | cut 1
74.00 x 4.00 mm



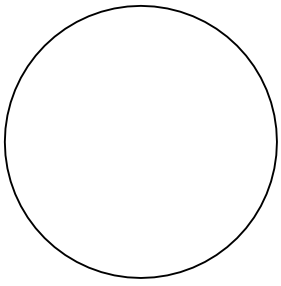
O02 | cut 1
74.00 x 4.00 mm



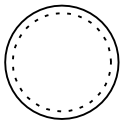
O03 | cut 1
74.00 x 4.00 mm



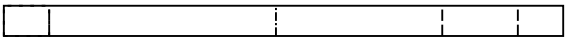
B | cut 1
36.00 x 36.00 mm



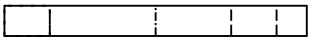
C | cut 1
15.00 x 15.00 mm



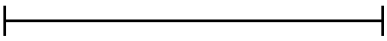
O01 | cut 1
74.00 x 4.00 mm



I01 | cut 1
40.00 x 4.00 mm



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



50 mm calibration

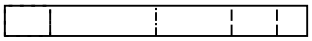
Print at 100% / Actual size. Do not fit to page. Original paper craft template.

Spider Chrysanthemum

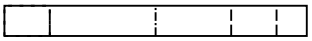
chrysanthemum / 1.0.0 / Letter / Template page 2

I08 | cut 1
40.00 x 4.00 mm

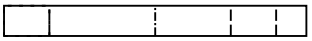
I04 | cut 1
40.00 x 4.00 mm



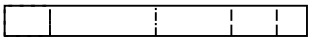
I05 | cut 1
40.00 x 4.00 mm



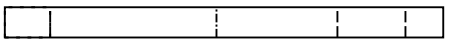
I06 | cut 1
40.00 x 4.00 mm



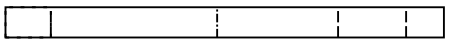
I07 | cut 1
40.00 x 4.00 mm



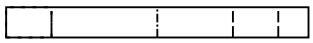
M11 | cut 1
58.00 x 4.00 mm



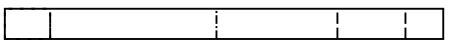
M12 | cut 1
58.00 x 4.00 mm



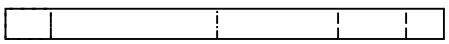
I03 | cut 1
40.00 x 4.00 mm



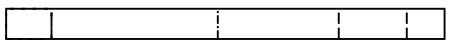
M08 | cut 1
58.00 x 4.00 mm



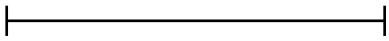
M09 | cut 1
58.00 x 4.00 mm



M10 | cut 1
58.00 x 4.00 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.

Spider Chrysanthemum

chrysanthemum / 1.0.0 / Letter / Assembly instructions

Finished size: Approximately 144 x 144 x 34 mm (flower head only)

Materials: 100-120 gsm ivory and pale yellow paper for rays and centre; 180-220 gsm green card for backing; Scissors; PVA glue; Ruler and blunt scoring tool; Protractor; Tweezers

Original transverse-fold construction; all 36 rays have integral 6 x 4 mm tabs.

Each panel is exactly developable and retains its flat edge lengths. Angular hooks deliberately interpret the natural fine curled petals; no arbitrary surface stretching or hidden wire is used.

The mesh idealizes paper as zero thickness. Tier offsets of 0.2 mm and the centre cover offset represent the glued stack approximately; actual tab thickness, overlap, springback and drying times depend on paper and glue.

Physical printing, cutting and assembly remain pending.

Part inventory (cut each instance once):

B: Flower backing

O01: O spider petal 1

O02: O spider petal 2

O03: O spider petal 3

O04: O spider petal 4

O05: O spider petal 5

O06: O spider petal 6

O07: O spider petal 7

O08: O spider petal 8

O09: O spider petal 9

O10: O spider petal 10

O11: O spider petal 11

O12: O spider petal 12

O13: O spider petal 13

O14: O spider petal 14

O15: O spider petal 15

O16: O spider petal 16

M01: M spider petal 1

M02: M spider petal 2

M03: M spider petal 3

M04: M spider petal 4

Spider Chrysanthemum

M05: M spider petal 5

M06: M spider petal 6

M07: M spider petal 7

M08: M spider petal 8

M09: M spider petal 9

M10: M spider petal 10

M11: M spider petal 11

M12: M spider petal 12

I01: I spider petal 1

I02: I spider petal 2

I03: I spider petal 3

I04: I spider petal 4

I05: I spider petal 5

I06: I spider petal 6

I07: I spider petal 7

I08: I spider petal 8

C: Central cover

1. Prepare the backing [B]: Print at 100% actual size; the ruler must measure 50 mm. Cut B, the 36 mm diameter backing, from 180-220 gsm green card. Mark its centre lightly and a reference ray to the right; all angles below are counterclockwise viewed from above. Keep B flat.

2. Fold the sixteen long outer rays [O01, O02, O03, O04, O05, O06, O07, O08, O09, O10, O11, O12, O13, O14, O15, O16]: Cut O01-O16 from 100-120 gsm paper: each strip is 74 x 4 mm. Measure from the square tab end and score at 6, 36, 58 and 68 mm. Keep the first 6 mm flat. With the printed face up, turn the next panel up 15 degrees, then down 15 degrees, up 55 degrees, and up 55 degrees at successive hinges. These are changes from the previous panel, not interior angles. The final 6 mm tip points inward and up. Use a ruler edge; do not cut fold lines or stretch the paper.

3. Mount the outer tier [B, O01, O02, O03, O04, O05, O06, O07, O08, O09, O10, O11, O12, O13, O14, O15, O16]: Put a thin film of PVA on the underside of each 6 x 4 mm tab only. Align the strip centreline radially: its tab end is 11 mm from B centre and its first hinge is 17 mm from centre. Set O01 on the reference ray; place successive IDs every 22.5 degrees. Press each tab flat onto B, leaving the long ray free. Let the entire ring dry for 10 minutes.

4. Fold the twelve middle rays [M01, M02, M03, M04, M05, M06, M07, M08, M09, M10, M11, M12]: Cut M01-M12, each 58 x 4 mm. Score at 6, 28, 44 and 53 mm from the tab end. Keep the 6 mm tab flat; at successive hinges turn up 40 degrees, down 15 degrees, up 45 degrees, then up 50 degrees. The four free panels have elevations 40, 25, 70 and 120 degrees above the backing plane. Match each strip to the same side profile.

5. Mount the middle tier [B, M01, M02, M03, M04, M05, M06, M07, M08, M09, M10, M11, M12]: Glue only the underside of each middle tab. Place each tab end 6 mm from the centre and its first hinge at radius 12 mm. Start M01 11.25 degrees counterclockwise from O01, then space IDs every 30 degrees. Tabs can lap the inner edge of the outer tabs by 1 mm; press these overlaps as well as the exposed

backing. Keep raised panels free of glue. Dry for 10 minutes.

6. Fold the eight upright inner rays [I01, I02, I03, I04, I05, I06, I07, I08]: Cut I01-I08, each 40 x 4 mm. Score at 6, 20, 30 and 36 mm from the tab end. With the tab flat, turn successive panels up 65 degrees, down 15 degrees, up 45 degrees, and up 45 degrees. Their elevations are 65, 50, 95 and 140 degrees: the short tips hook inward. All bends run straight across the 4 mm width; do not cup or twist the strips.

7. Mount the inner crown [B, I01, I02, I03, I04, I05, I06, I07, I08]: Glue the underside of the inner 6 mm tabs. Set tab ends at radius 1 mm and first hinges at radius 7 mm. Place I01 at 22.5 degrees from the reference ray and successive IDs every 45 degrees. Near the centre the tabs overlap: lay them down in ID order with thin glue between contacting tabs. Press with tweezers and dry 10 minutes. Keep each free panel lifting outward from its hinge.

8. Close the centre [C, I01, I02, I03, I04, I05, I06, I07, I08]: Cut the 15 mm diameter gold cover C from the same lightweight paper. Apply glue within its marked central area on the underside and centre it over the inner tabs. Ease its rim beneath the rising inner petals without flattening their 7 mm-radius hinges. Press only the flat centre and allow 20 minutes to dry. This is a flower-head ornament with a flat backing, not a stemmed flower; lift it by B, never by a ray.