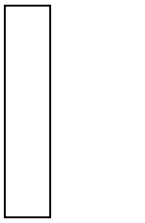
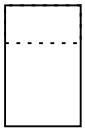
Miniature Treasure Chest

treasure-chest / 1.0.0 / Letter / Template page 1

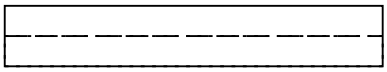
B2R | cut 1
6.00 x 28.00 mm



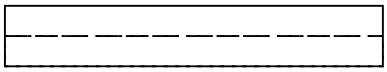
K | cut 1
10.00 x 16.00 mm



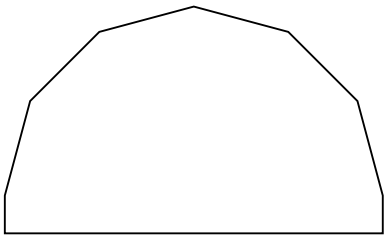
S1 | cut 1
50.00 x 8.00 mm



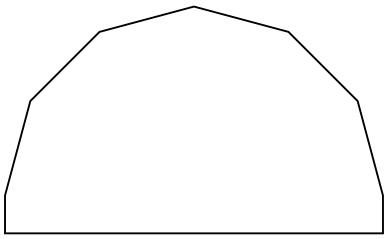
S2 | cut 1
50.00 x 8.00 mm



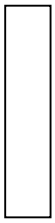
E1 | cut 1
50.00 x 30.00 mm



E2 | cut 1
50.00 x 30.00 mm



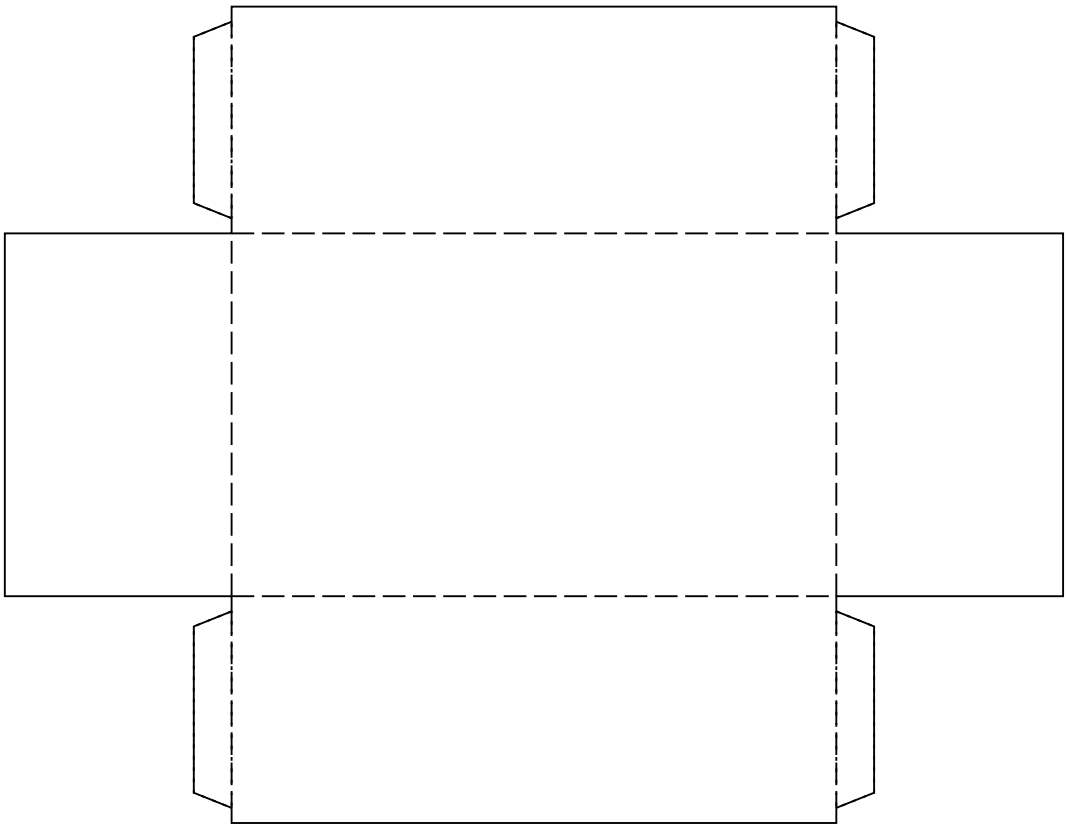
B1F | cut 1
6.00 x 28.00 mm



B1R | cut 1
6.00 x 28.00 mm

B2F | cut 1
6.00 x 28.00 mm

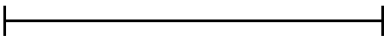
T | cut 1
140.00 x 108.00 mm



B1 | cut 1
6.00 x 87.65 mm

B2 | cut 1
6.00 x 87.65 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.

Miniature Treasure Chest

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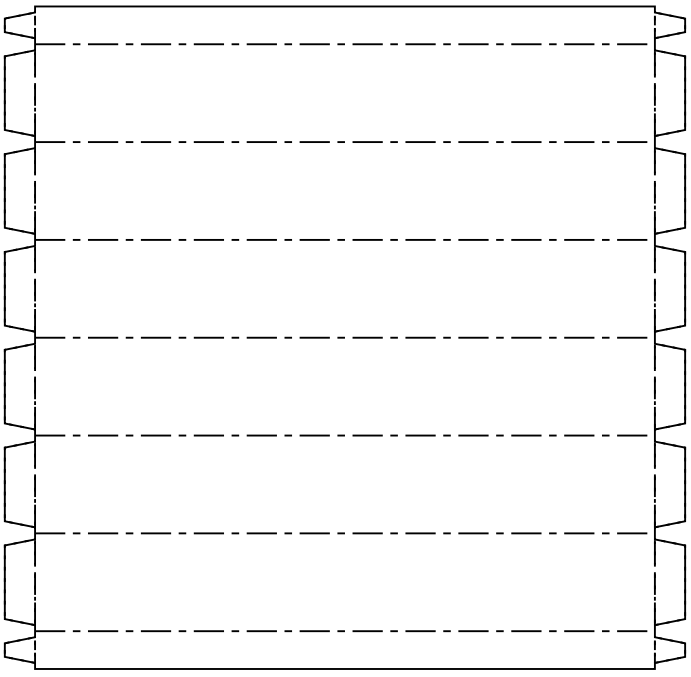
L | cut 1
90.00 x 87.65 mm



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.

Miniature Treasure Chest

treasure-chest / 1.0.0 / Letter / Assembly instructions

Finished size: 82 x 50.25 x 55.2 mm; tray 80 x 48 x 30 mm

Materials: 160-200 gsm cardstock (nominal thickness at most 0.25 mm); Scissors or craft knife; Scoring tool and ruler; PVA glue

Original rigid-face paper construction. Physical printing and assembly are pending.

The lid is removable, not hinged. Its 82 x 50 mm nominal opening surrounds the 80 x 48 mm tray with 1 mm clearance per side before paper and glue thickness.

Two inward 4 mm seating ledges rest on the tray rim at z=30 mm; lid skirts descend to z=25 mm. The latch is decorative and does not lock.

Six planar facets approximate a semicircle of radius 25 mm without stretching. Each exact chord is 50*sin(15 degrees) = 12.940952 mm; six chords total 77.645714 mm, plus two 5 mm skirts = 87.645714 mm.

Mesh paper is zero thickness; straps are displayed with a 0.2 mm vertical layer offset and latch with 0.25 mm outward offset. Actual lamination and crease radii depend on stock.

Part inventory (cut each instance once):

T: Tray with corner tabs

L: Faceted lid and end tabs

E1: Lid end cheek

E2: Lid end cheek

S1: Lid seating ledge

S2: Lid seating ledge

B1: Lid strap

B1F: Tray strap

B1R: Tray strap

B2: Lid strap

B2F: Tray strap

B2R: Tray strap

K: Decorative free latch

1. Cut and score [T, L, E1, E2]: Print at 100% and use the 50 mm ruler. Cut T, L and both cheeks; retain every integral tab. Score all dashed lines. T has an 80 x 48 mm floor and four 30 mm walls. Its four corner tabs project 5 mm, with roots from 2 to 28 mm up each long wall and 2 mm bevels.

2. Assemble the rectangular tray [T]: Raise all four walls inward 90 degrees. Turn the four tabs inward 90 degrees onto the inside faces of the short end walls. Glue the full 5 mm tab depth; keep the rim level at 30 mm and the floor square at 80 x 48 mm. Hold until dry.

3. Form the polygonal lid [L, E1, E2]: L main sheet is 82 x 87.645714 mm, excluding end tabs. From either skirt edge, scores are at 5, 17.940952, 30.881905, 43.822857, 56.763809, 69.704761 and 82.645714 mm. Bend each skirt-to-arch score by 15 degrees and each of the five arch scores by 30 degrees, convex outside (mountain). This produces a 50 mm span, 25 mm arch rise and two vertical 5 mm skirts. Turn all end tabs inward 90 degrees. Each tab is 4 mm deep; root is inset 0.8 mm from facet ends and tip 1.6 mm. Glue E1/E2 onto the tabs at the two ends, matching every facet and the flat skirt-bottom baseline. Cheeks are 50 mm wide and 30 mm high. Dry with

ends parallel, 82 mm apart.

4. Install removable-lid supports [S1, S2, L]: Each support is 50 x 8 mm, scored lengthwise into two 4 mm panels. Fold 90 degrees to an L. Glue one panel inside each lid skirt, centered along the 82 mm length (15 mm from each end), with its crease exactly at the skirt-to-arch spring line. Glue panel runs 4 mm DOWN from that line; free shelf projects 4 mm inward horizontally. Let dry off the tray. Shelves rest on the 30 mm tray rim; skirt overlaps the top 5 mm of the tray with 1 mm nominal clearance per side. Lift straight up to remove; never glue lid to tray.

5. Add the paper straps [B1, B2, B1F, B1R, B2F, B2R]: The two lid straps are 6 x 87.645714 mm with the same scores and bends as L: 5 mm skirts and six 12.940952 mm facets. Glue lightly along their undersides to the exterior lid, with left edges 15 and 61 mm from its left end. Glue the four 6 x 28 mm tray straps on front and rear walls at x=14 and 60 mm from the tray left edge, bottoms 1 mm above floor. They align with the lid straps; do not bridge the removable seam.

6. Fit the free decorative latch [K, L, T]: Center the 10 x 16 mm gold latch on the front skirt. Glue only its marked top 5 mm to the skirt, top flush with the arch spring line. The lower 11 mm hangs freely in front of the tray; keep it unglued so the lid lifts off. Seat the dry lid on its ledges without forcing. This is a miniature paper container, not a load-rated box or working lock. Physical assembly and fit remain pending.