

Faceted Blue Whale

whale / 1.0.0 / Letter / Template page 1

B24 | cut 1
59.11 x 11.57 mm



B26 | cut 1
12.00 x 8.00 mm



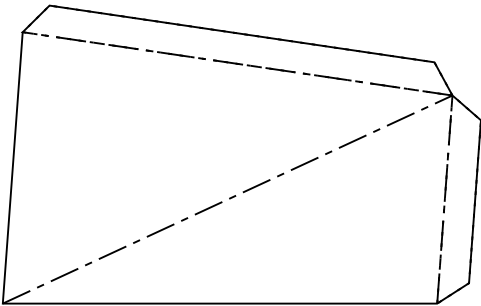
ER | cut 1
4.60 x 4.60 mm



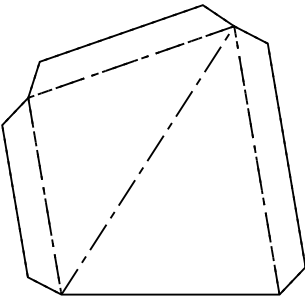
EL | cut 1
4.60 x 4.60 mm



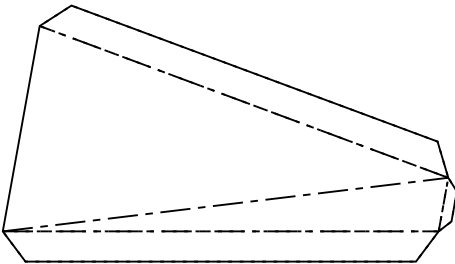
B13 | cut 1
63.26 x 39.42 mm



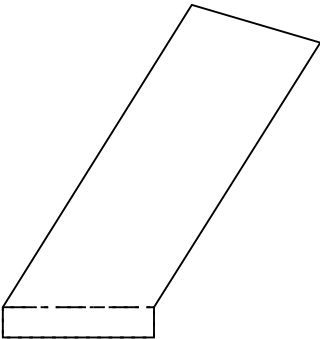
B05 | cut 1
40.13 x 38.29 mm



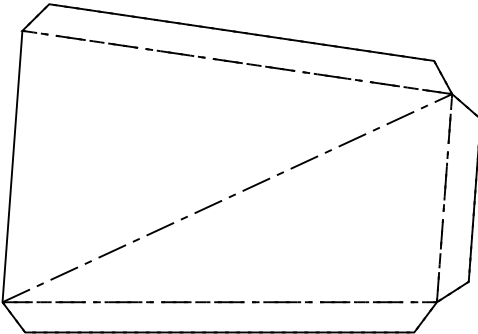
B17 | cut 1
60.07 x 33.87 mm



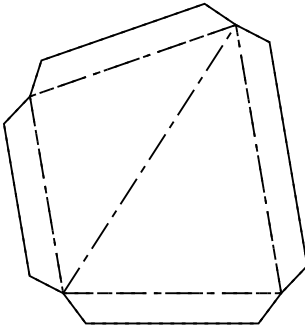
FL | cut 1
42.00 x 44.00 mm



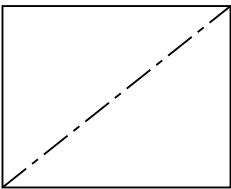
B09 | cut 1
63.26 x 43.42 mm



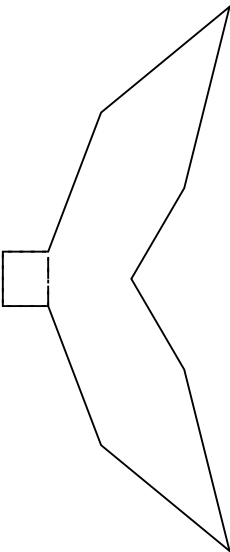
B01 | cut 1
40.13 x 42.29 mm



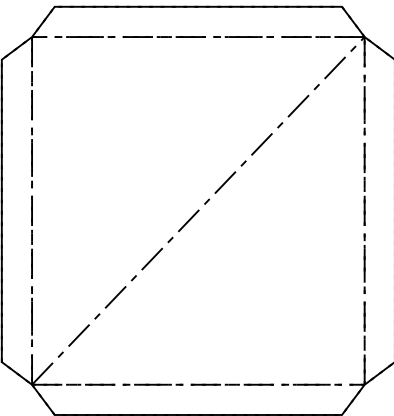
S06 | cut 1
30.17 x 24.00 mm



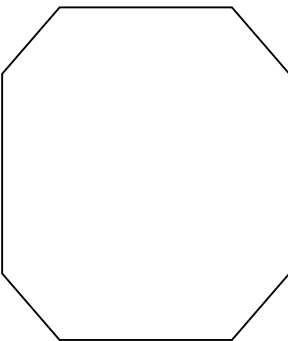
T | cut 1
30.00 x 72.00 mm



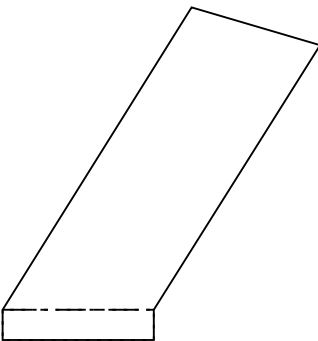
S01 | cut 1
52.00 x 54.00 mm



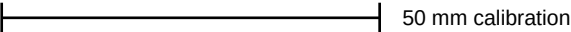
B25 | cut 1
38.00 x 44.00 mm



FR | cut 1
42.00 x 44.00 mm



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

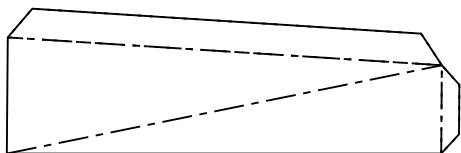


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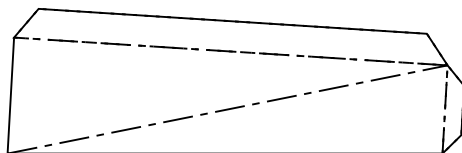
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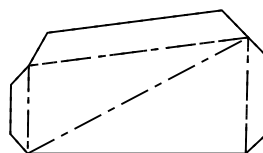
B14 | cut 1
59.87 x 19.17 mm



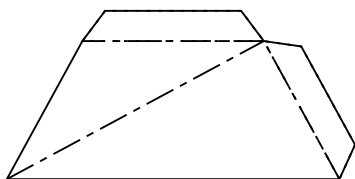
B12 | cut 1
60.40 x 19.14 mm



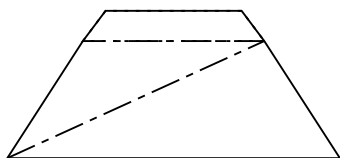
B02 | cut 1
34.48 x 18.95 mm



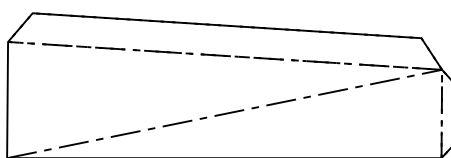
S03 | cut 1
46.07 x 22.27 mm



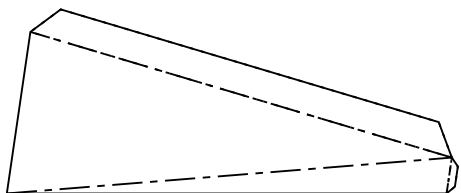
S05 | cut 1
44.00 x 19.49 mm



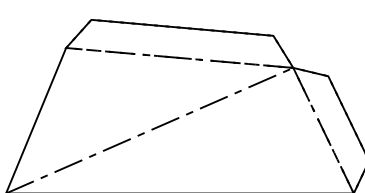
B10 | cut 1
59.87 x 19.17 mm



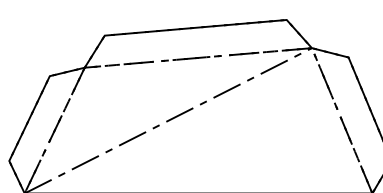
B23 | cut 1
59.67 x 24.35 mm



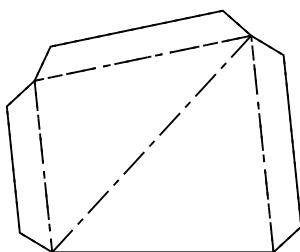
S04 | cut 1
48.02 x 22.97 mm



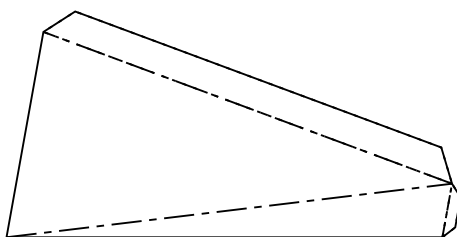
S02 | cut 1
50.57 x 22.95 mm



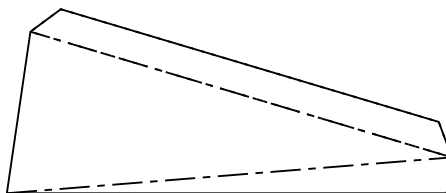
B07 | cut 1
38.95 x 31.95 mm



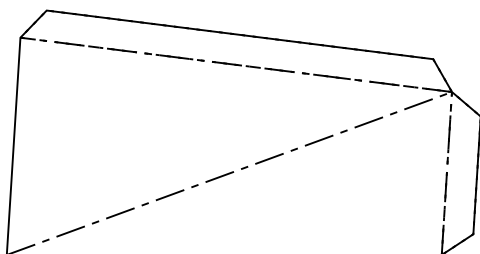
B21 | cut 1
60.07 x 29.87 mm



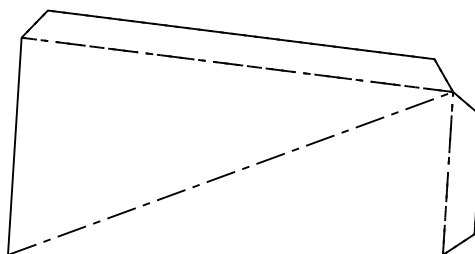
B19 | cut 1
59.67 x 24.35 mm



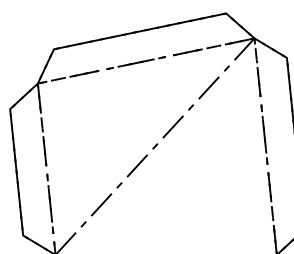
B11 | cut 1
62.70 x 32.34 mm



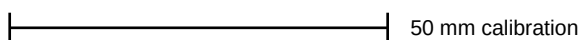
B15 | cut 1
62.70 x 32.34 mm



B03 | cut 1
38.95 x 31.95 mm



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

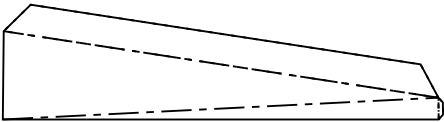


Print at 100% / Actual size. Do not fit to page. Original paper craft template.

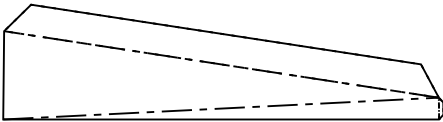
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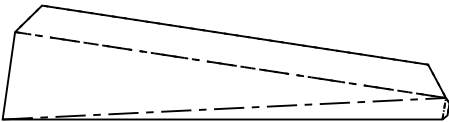
B18 | cut 1
58.23 x 15.18 mm



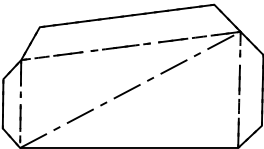
B22 | cut 1
58.23 x 15.18 mm



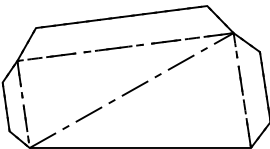
B20 | cut 1
59.11 x 15.07 mm



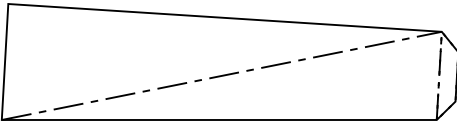
B06 | cut 1
34.48 x 18.95 mm



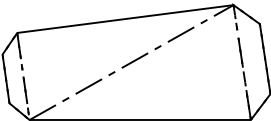
B04 | cut 1
35.44 x 18.78 mm



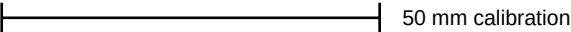
B16 | cut 1
60.40 x 15.34 mm



B08 | cut 1
35.44 x 15.20 mm



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



Faceted Blue Whale

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Finished size: 164 x approximately 123 x 60 mm, including pedestal and flippers

Materials: 180-220 gsm cardstock; Scissors or craft knife; Scoring tool and ruler; PVA glue

Original measured panel construction; no stretched surface. Every seam tab is present in both the cut net and assembled mesh.

Body and pedestal are closed shells assembled from individually tabbed rigid panels. Flippers and flukes are single-thickness paper blades, not inflated volumes.

Zero paper/glue thickness is idealized; eye overlays have 0.08 mm display separation. Crease springback and glue curing are not simulated.

Physical printing, assembly, seam access and display stability remain unverified; physical validation pending.

Part inventory (cut each instance once):

B01: B01 tabs to B08,B09,B02,B25

B02: B02 tabs to B10,B03,B25

B03: B03 tabs to B11,B04,B25

B04: B04 tabs to B12,B05,B25

B05: B05 tabs to B13,B06,B25

B06: B06 tabs to B14,B07,B25

B07: B07 tabs to B15,B08,B25

B08: B08 tabs to B16,B25

B09: B09 tabs to B16,B17,B10

B10: B10 tabs to B18,B11

B11: B11 tabs to B19,B12

B12: B12 tabs to B20,B13

B13: B13 tabs to B21,B14

B14: B14 tabs to B22,B15

B15: B15 tabs to B23,B16

B16: B16 tabs to B24

B17: B17 tabs to B24,B26,B18

B18: B18 tabs to B26,B19

B19: B19 tabs to B26,B20

B20: B20 tabs to B26,B21

B21: B21 tabs to B26,B22

B22: B22 tabs to B26,B23

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B23: B23 tabs to B26,B24

B24: B24 tabs to B26

B25: B25 closing panel

B26: B26 closing panel

S01: S01 tabs to S05,S04,S03,S02

S02: S02 tabs to S03,S06,S05

S03: S03 tabs to S04,S06

S04: S04 tabs to S05,S06

S05: S05 tabs to S06

S06: S06 closing panel

FR: R flipper; 4 mm root tab

FL: L flipper; 4 mm root tab

T: Horizontal flukes; 6 mm dorsal tab

ER: R eye

EL: L eye

1. Cut and score at actual size [B01, B02, B03, B04, B05, B06, B07, B08, B09, B10, B11, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B22, B23, B24, B25, B26]: Print at 100%; measure the 50 mm ruler. Cut each numbered piece once. Score all tab roots and panel diagonals. Ease the diagonal creases only enough to seat the adjoining seams; these make the changing oval sections without stretching. Planar pedestal diagonals remain flat. Body panels B01-B08 run nose to shoulder (28 mm); B09-B16 shoulder to waist (57 mm); B17-B24 waist to tail (55 mm). Tabs are 4 mm deep except the short tail seams, where they are proportionally narrower. Labels list the receiving panel IDs.

2. Close the broad head [B01, B02, B03, B04, B05, B06, B07, B08, B25]: Arrange B01-B08 in numerical order around the axis, white B01 underneath; adjacent long seams join in sequence, with B08 returning to B01. Fold tabs inward and glue behind the panel named on each label. Use B25 as the nose cap: 44 mm wide, 38 mm high, with its longer horizontal edges at top and bottom. Glue B01-B08 front tabs behind B25. The shoulder opening must be 60 mm wide by 48 mm high. Dry before extending the body.

3. Join the tapering middle [B09, B10, B11, B12, B13, B14, B15, B16]: Attach B09 behind B01, B10 behind B02, continuing through B16 behind B08, using the rear tabs on the head panels. Close the eight middle longitudinal seams in numerical order. Keep the white B09 belly below. The rear opening measures 46 mm wide by 36 mm high. Seat seams edge-to-edge; the entire tab goes behind its receiver, not into a gap.

4. Close the narrow tail stock [B17, B18, B19, B20, B21, B22, B23, B24, B26]: Join B17-B24 to B09-B16 respectively. Close the longitudinal seams around the tail stock. Before the final seam sets, tuck B26 onto the rear tabs to close the 12 x 8 mm octagonal end. The shell is 140 mm long; all 26 panels now form a closed hull. Let the glue dry fully.

5. Build the fitted pedestal [S01, S02, S03, S04, S05, S06, B09]: S01 is the 46 x 44 mm bottom. Fold its tabs up into S02-S05, then join the four side seams. Close with S06, the 30 x 24 mm sloping top. Its low edge is 13.26 mm above the table, high edge 16.42 mm. Dry on a flat surface. Center the white B09 belly on S06: the support runs from 40 to 70 mm behind the nose, with the high edge toward the tail. Apply a thin glue film to S06 and secure the belly; hold without crushing.

6. Fit the swept flippers [FR, FL]: FR attaches to B11, FL to B15. Each 20 mm root starts 45 mm behind the nose, at height 30 mm

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above the table, and follows the side taper rearward. Glue the 4 mm root tab upward on the side panel, then fold the blade outward and 22 degrees below horizontal (112 degrees from the upward tab). Keep both tips clear of the table. Allow to dry supported.

7. Add horizontal tail flukes [T]: Fold T at its 7.2 mm wide root. Glue the 6 mm tab forward onto dorsal panel B21, centered on its narrow rear edge. The tab follows the back slope, about 14.3 degrees above the horizontal fluke plane. Flukes extend 24 mm aft of the tail stock at height 40 mm; their 72 mm span lies horizontally, with the center notch facing backward.

8. Place eyes and finish [ER, EL]: Glue ER to B03 and EL to B07. Eye centers are 15 mm behind the nose and 38 mm above the table. Use the pedestal to keep the whale level while all seams cure. The pedestal is part of the display; do not balance the shell on its flippers.