## \$ Heart-and-Arrow

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A dollar bill makes a model $30 \mathrm{~mm} \times 45 \mathrm{~mm}$. For your first attempt, begin with a $3 \times 7$ rectangle larger than a dollar bill.


1. Either side up. Crease at eights horizontally, halfway vertically. Flex all creases both ways.

2. Horizontal creases not shown. Bisect the rectangles.

3. Make this crease sharp only where it crosses the center horizontal line.

4. Bisect the outer rectangles.

5. Use the mark to make crease " $A$ ". Then use " $A$ " and the center vertical line to make crease " $B$ ", at the same distance. Flex both.

6. On each side, use the outer 2 creases to add another.

7. All creases shown. Mountain the top and bottom eighths behind.

8. Swing behind on the indicated crease. Turn over.

9. Flip down the top eighth, squashing the corner at the right.

## \$ Heart-and-Arrow (cont.)

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10. Pull out paper from under the squash, flipping down the long edge.

11. Swing over the long flap, while pulling up the triangle shown.

12. Swing flap back on existing crease, while flipping down the top eighth and squashing a tiny diagonal.

13. Swing back. Both sides of model will then look similar.

14. Crease.

15. Pleat and sink on existing creases.

16. Undo last step. Turn over and repeat 14-16.

17. Crease top flap. Repeat behind.

18. Reverse-fold on existing crease. Turn over.

## \$ Heart-and-Arrow (cont.)

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19. Reverse-fold on the crease; rear-half is double thickness.

22. Fold the new flap to the right.

25. Repeat $20-24$ behind.

20. Swing flap to left on existing crease, squashing only the tiny diagonal indicated. The X-ray line is a hidden valley fold.

23. Reverse-fold at the top, closed-sink at the bottom.

26. Reverse-fold. At the left end, only the embedded layer is reverse-folded.

21. Segment " $C$ " is the new crease. Swing back down on existing crease, squashing the diagonal shown. The X-ray line is a hidden valley fold.

24. Pull gently open at the top, and reform the sink from step 15 .

27. Swing flap to the left, squashing the corner behind it.

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28. Swivel again. Note the tiny squash (mountain-fold).

31. Swing down 2 edges, swiveling under the sunken area. Repeat 26-31 behind.

29. Flip up an edge, opening the triangular pocket.

32. Swing the large, hidden triangular flap upwards, reverse-folding the left side.

35. Reverse-fold the top point down, tucking the tip into the pocket immediately in front of it.

30. Closed-sink the small twotoned trapezoid. Then swing the pleated flap to the right.

33. Reverse-fold the middle triangle upwards.

36. Like so. Now we begin on the tail of the arrow.

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37. Tail: notice pleats are not perfectly symmetric. Reversefold.

40. Bring one layer to surface (a closed-sink).

43. Tuck in the loose triangle.

46. Swing the middle triangle down and behind, dragging the upper triangle.

38. (Not all edges shown.) Swing over.

41. Thus. Turn model over top-to-bottom.


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48. Head of the arrow. Pleats are symmetric. Reverse-fold first 2 corners.

49. (Not all edges shown.) Swing 2 flaps to the left.

52. Valley-fold top corner. Reverse-fold next corner.

55. Swing rear half of large triangle to front.


50. Pull out corner.

53. Reverse-fold the remaining corner; its rear half is smaller than its front.

56. Tuck new flap into pocket behind. Front edges of arrowhead are now both closed.
58. There are now 3 tiny triangular flaps at the tip. Wrap the top layer of the front triangle to its back. Very hard! Unfold point D and 3 pleats of the shaft while executing.
57. Squash. Turn over top-to-bottom and repeat on the other side.

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59. Tuck the middle and rear points inside the front point (sequentially or nested). Arrowhead complete.

60. Left upper point of the heart. Crease and flex. Then open out the tip into a 3 -sided pyramid, the 2 front right edges kept together.

61. Top view. Sink the tip on the crease just made (keeping the double-edge together).

62. Back to a front view. Reverse-fold nested corner down.

63. Reverse-fold the corner back up, tucking into the tiny pocket. These steps achieve a closed sink more easily. Repeat 60-63 on the right point of the heart.

64. Model complete. Bend arrow head and tail outwards where they emerge from the heart.

There are unfortunately 2 separate points at the bottom of the heart, but this does help the model stand up a little better. And though I regret the two-tone harlequin-esque finish, it's not as glaring with a real dollar bill as in these diagrams. (I regard these shortcomings as the price of achieving my self-imposed goal: the arrow shaft emerges from under the planes of the heart.)

