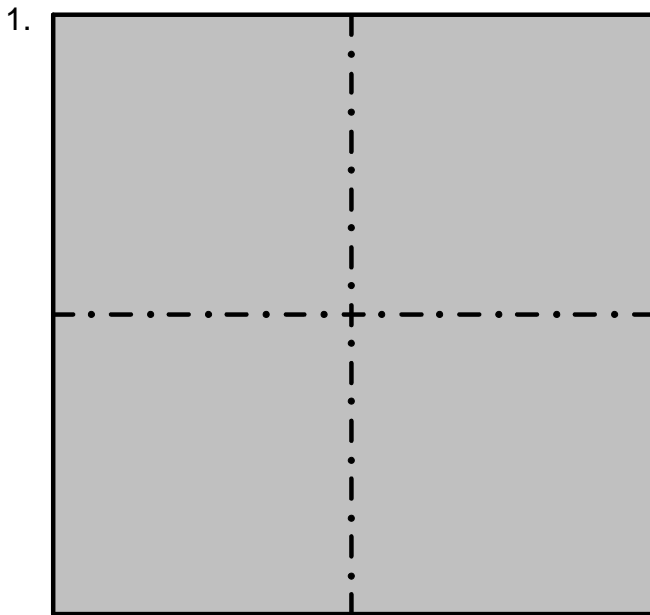
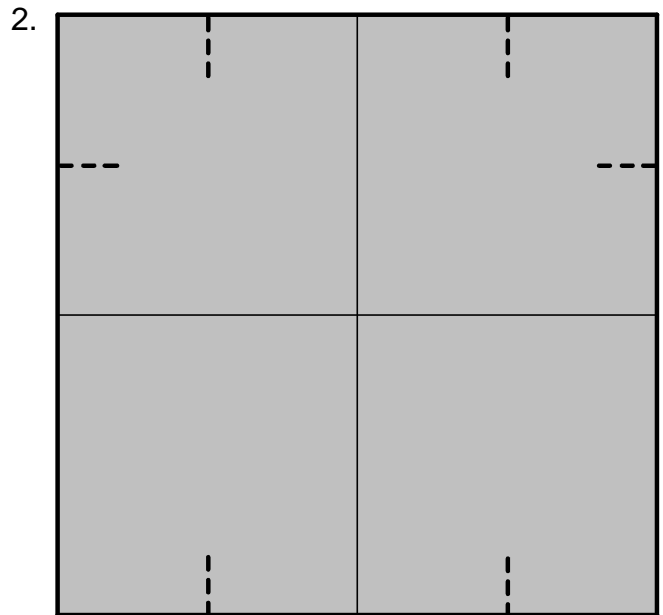


Long Necked Seed Bug

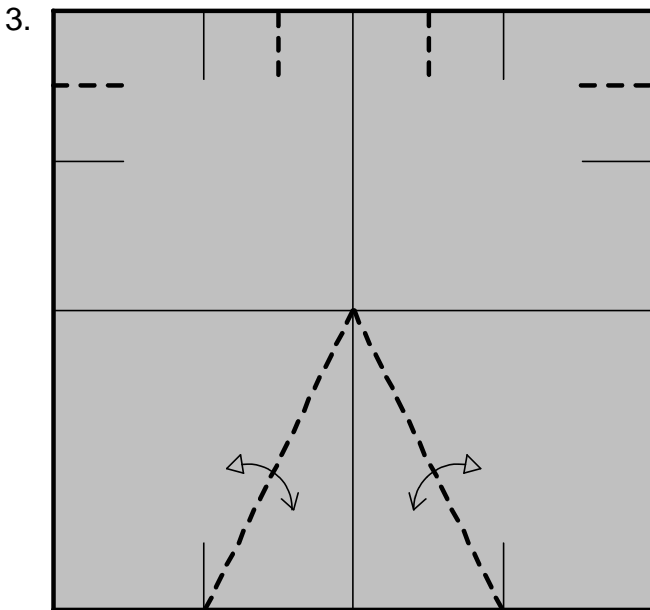
by Derek McGann



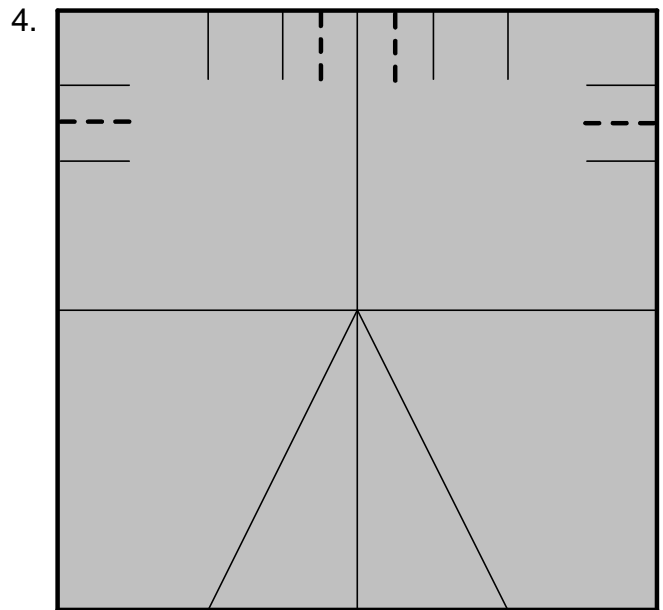
Start with the color-side up. Mountain fold and unfold in half both directions.



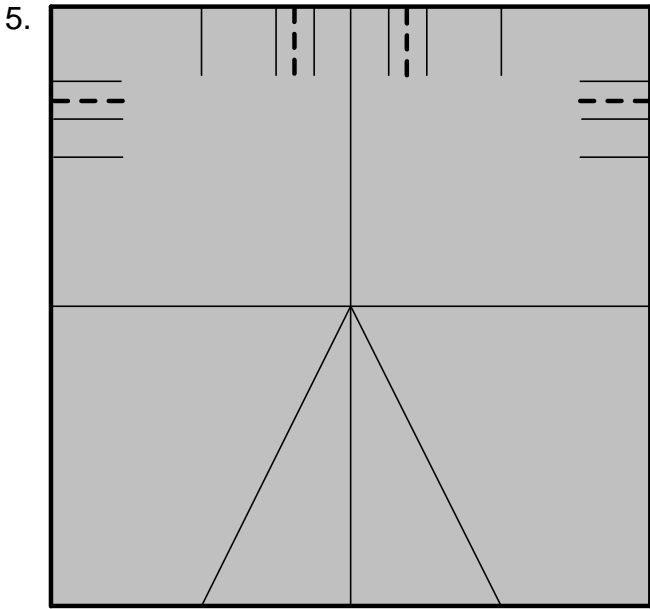
Pinch the indicated segments in half in six places.



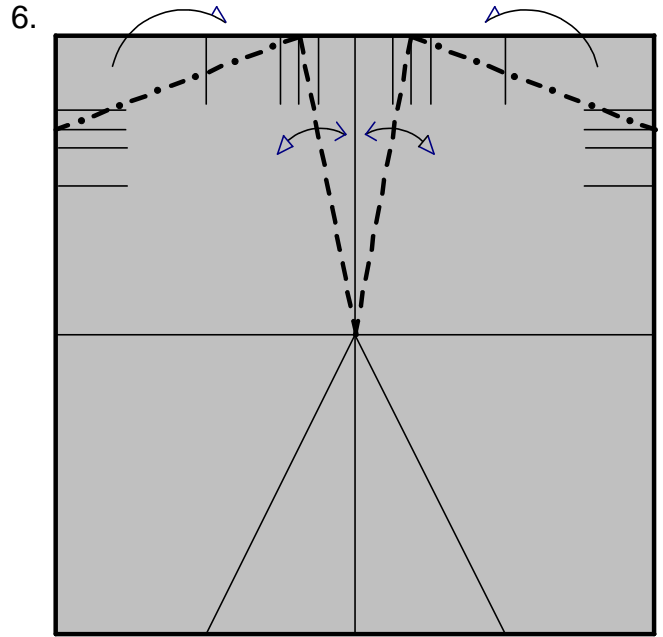
Valley fold and unfold in two places. Pinch the indicated segments in half in four places.



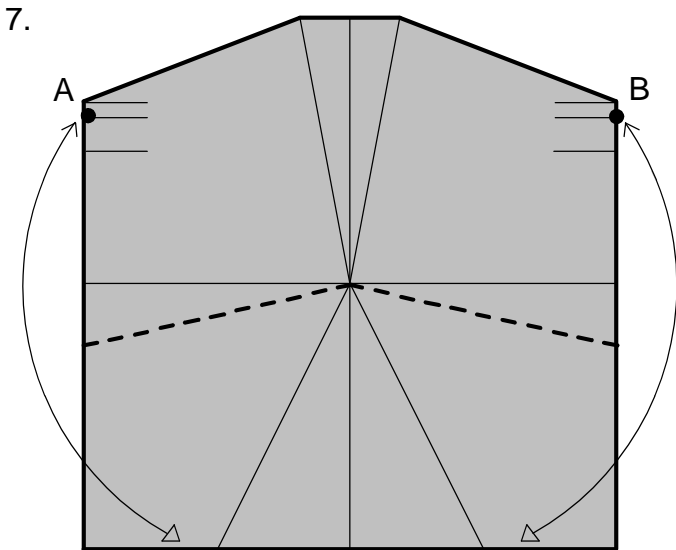
Pinch the indicated segments in half in four places.



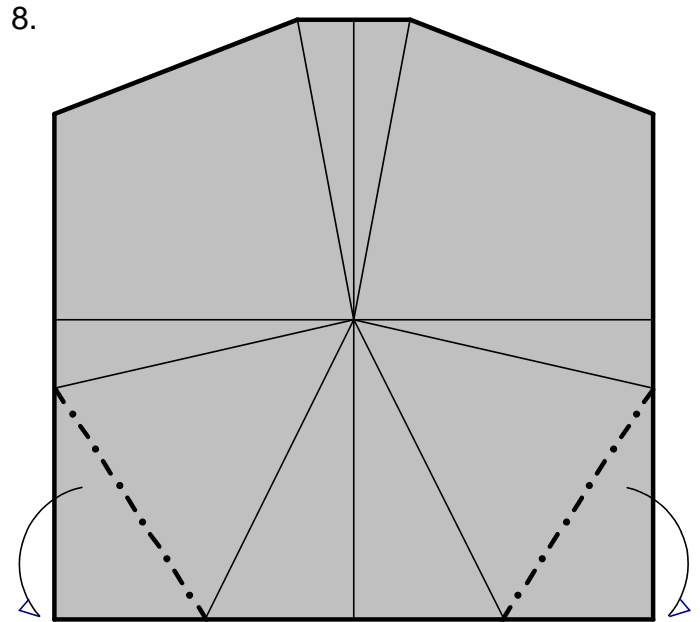
Pinch the indicated segments in half in four places.



Valley fold and unfold in two places. Mountain fold in two places – do not unfold the mountain folds.

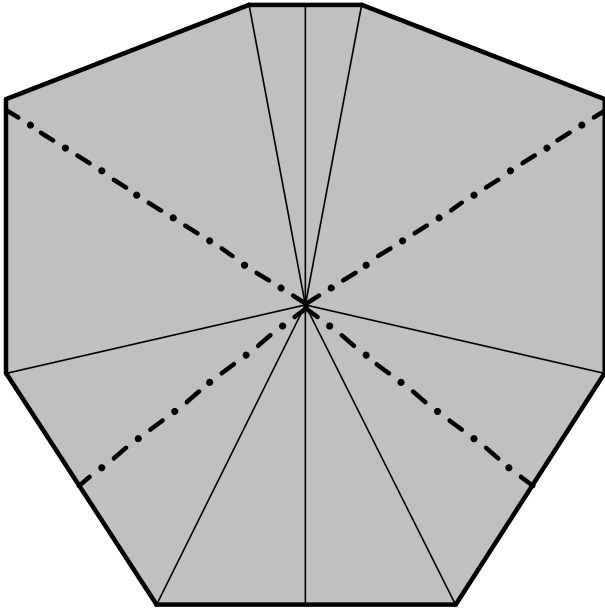


Valley fold and unfold point A to the bottom edge so that the fold passes through the center of the model. Repeat with point B.



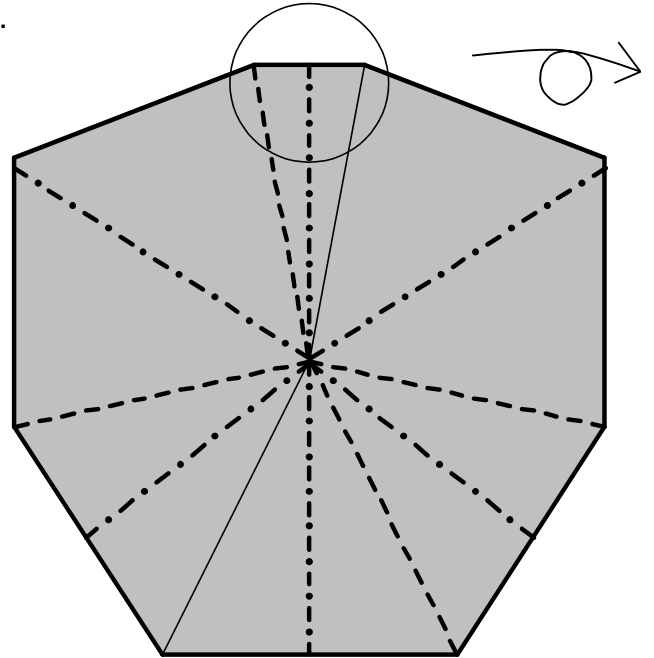
Mountain fold in two places. Do not unfold.

9.



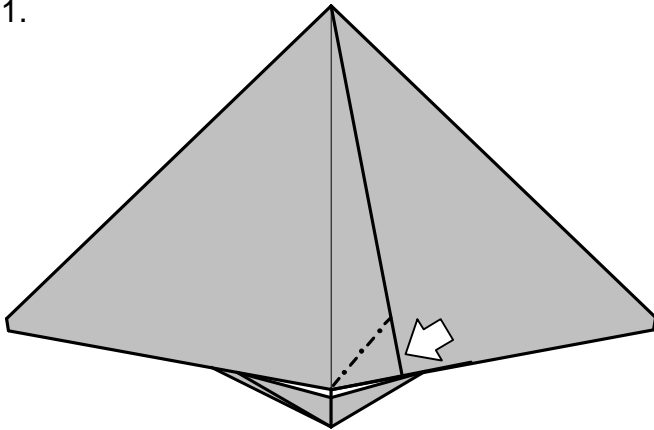
Mountain fold and unfold four angle bisectors.

10.



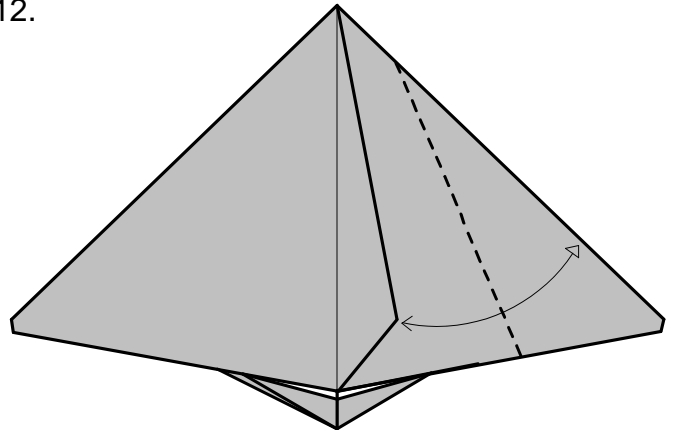
Collapse on existing creases. The narrow circled flap should be in front.

11.



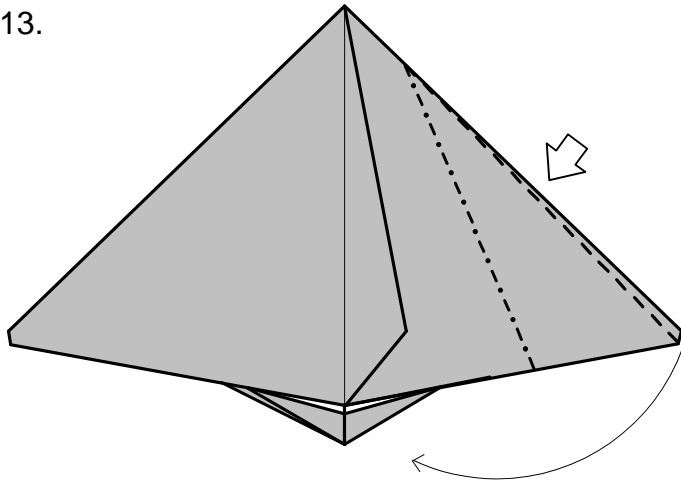
Inside reverse fold the corner of the narrow flap to the center line.

12.



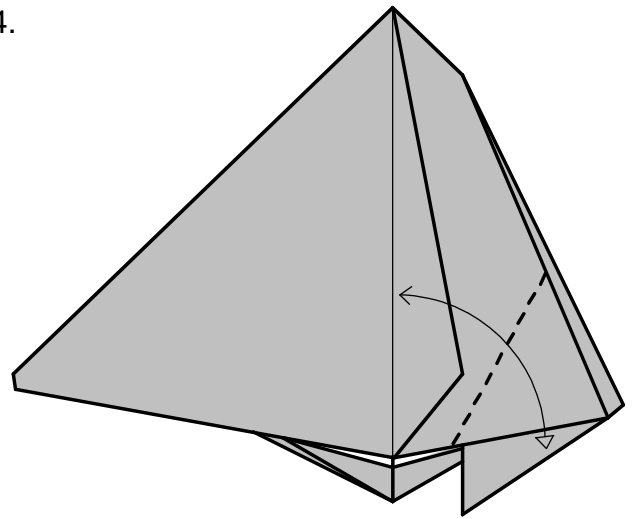
Valley fold and unfold so that the right edge touches the point on the narrow flap and is parallel to the center line.

13.



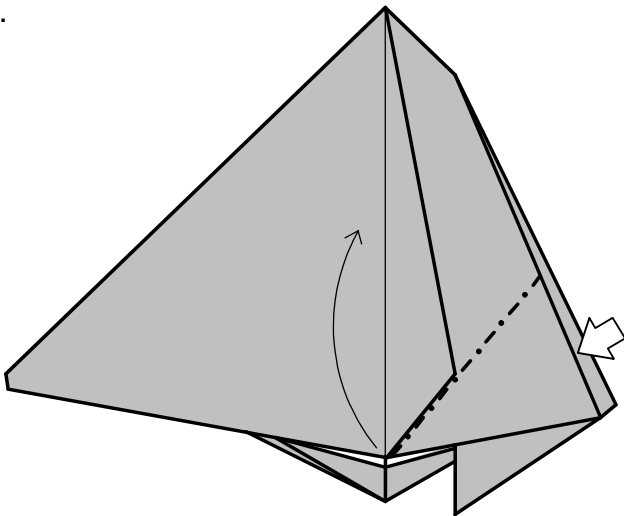
Inside reverse fold the flap at a slight offset so that the flap comes to a sharp point. The mountain fold lies on the crease made in step 12.

14.



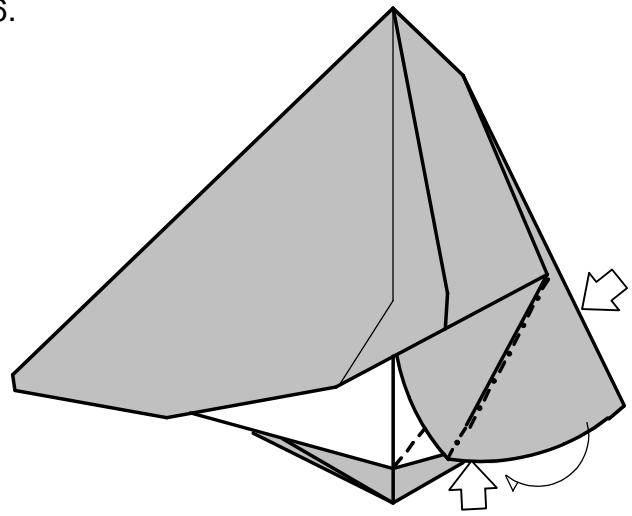
Fold and unfold the edge to the center line. The model will not lie flat during this process. Mountain fold and unfold the next edge to the center line in a similar fashion.

15.



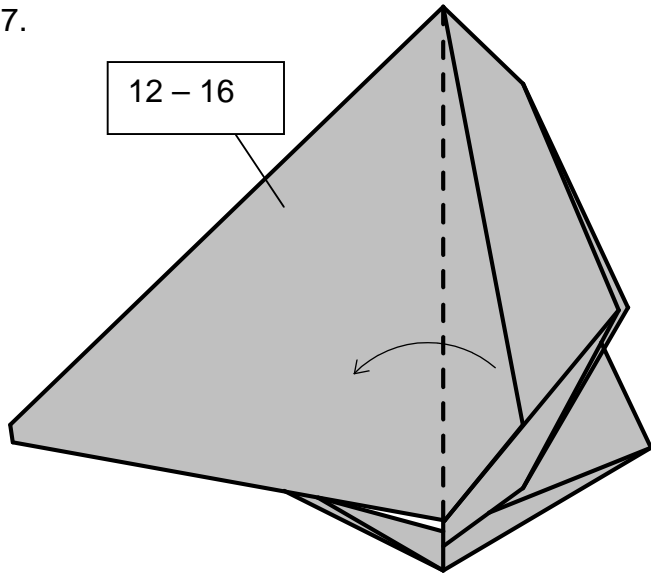
Lift the entire flap up while inside reverse folding the edge to the center line. The valley fold underneath will lie on the crease made from step 14. The result will not lie flat.

16.



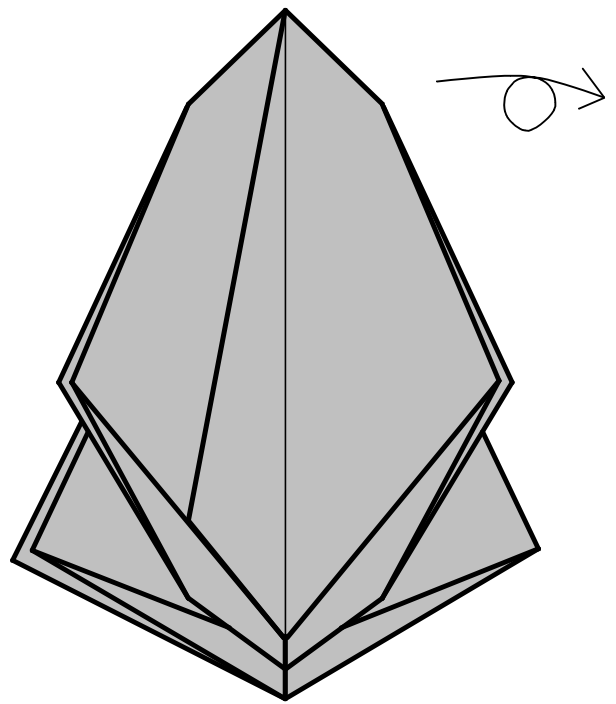
Reverse fold the next edge to the center line on the crease made by the second fold in step 14. The flap must be changed from convex to concave by pushing on the bottom of the rounded area to accomplish this.

17.



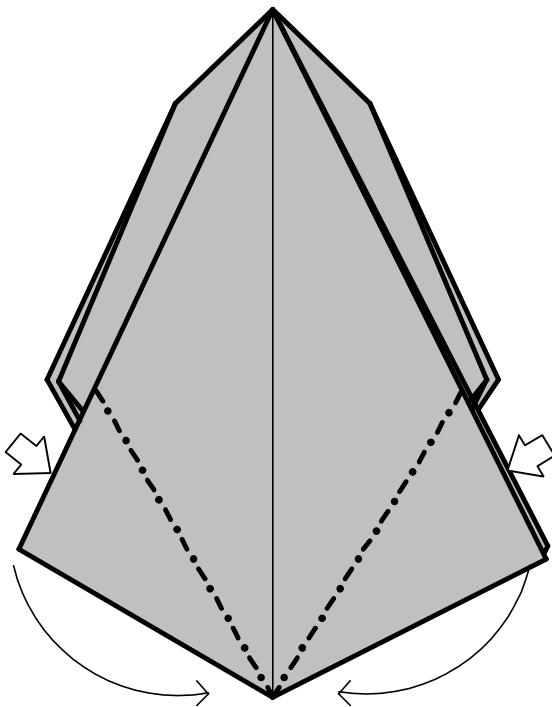
Swing the narrow flap to the left and repeat steps 12 through 16 in mirror image on the other side.

18.



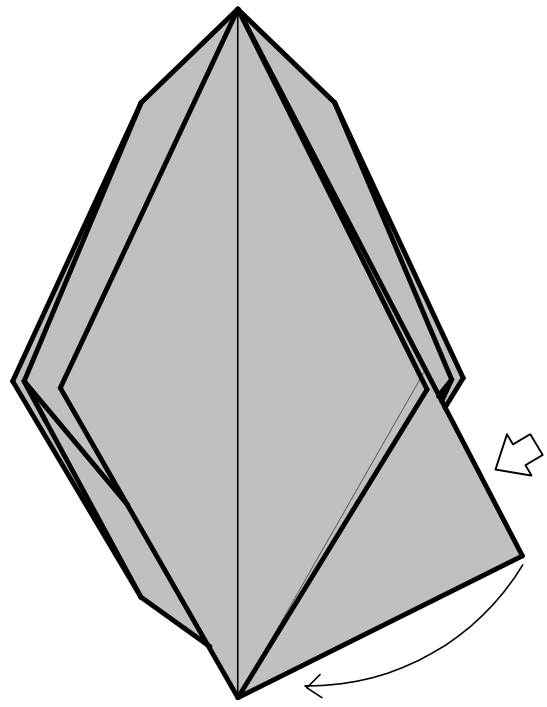
Turn over.

19.



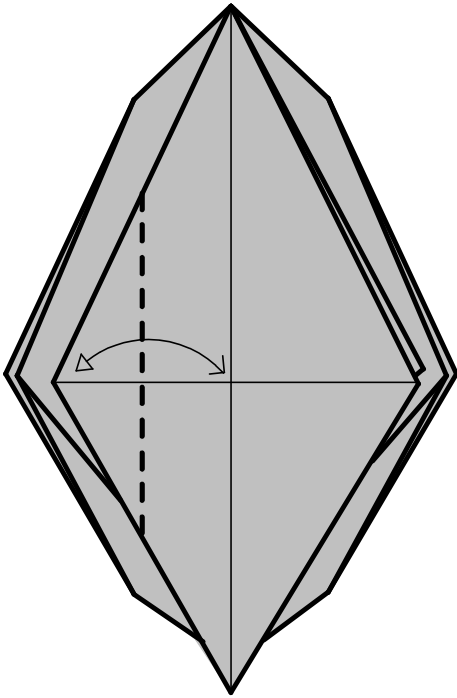
Inside reverse fold two edges to the center line.

20.



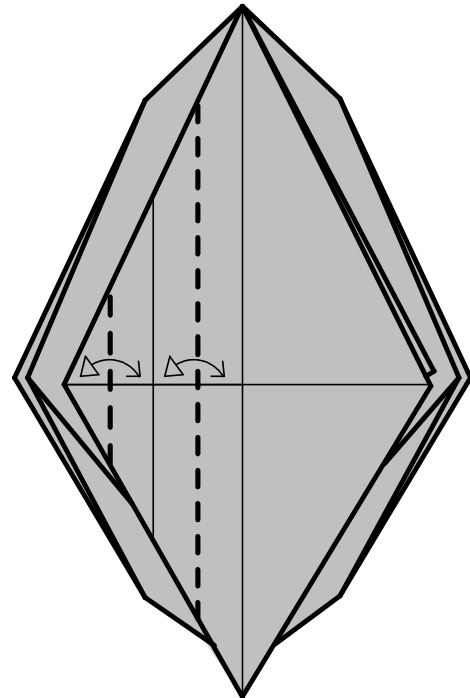
Inside reverse fold one more edge to the center line.

21.



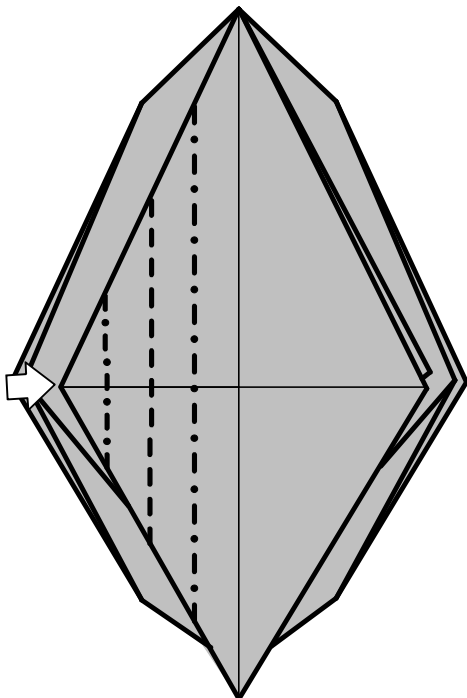
Valley fold and unfold the corner to the center line.

22.



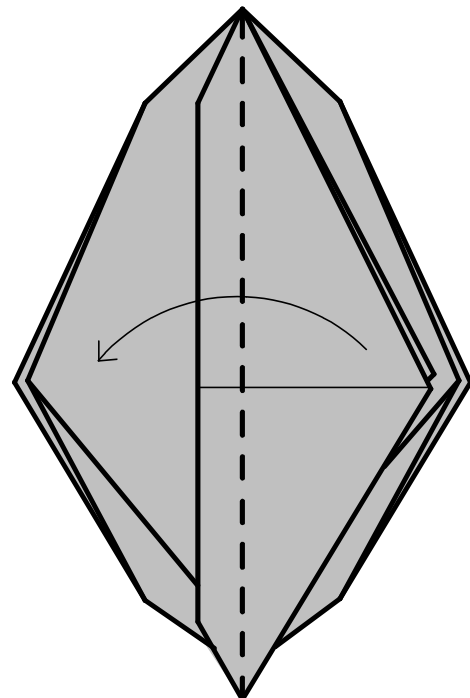
Valley fold and unfold in two places.

23.



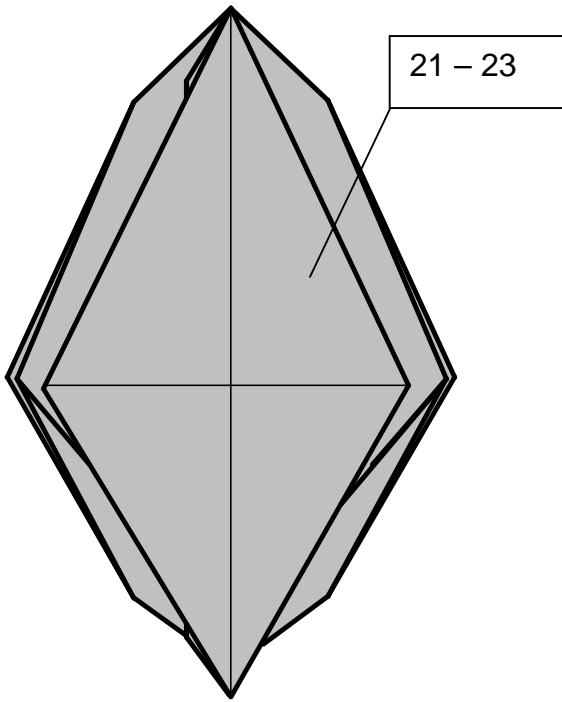
Open sink in and out on existing creases.

24.



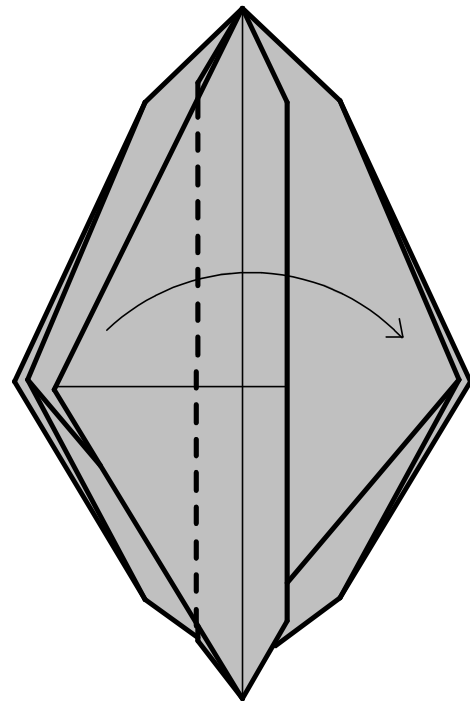
Swing the flap over to the left.

25.



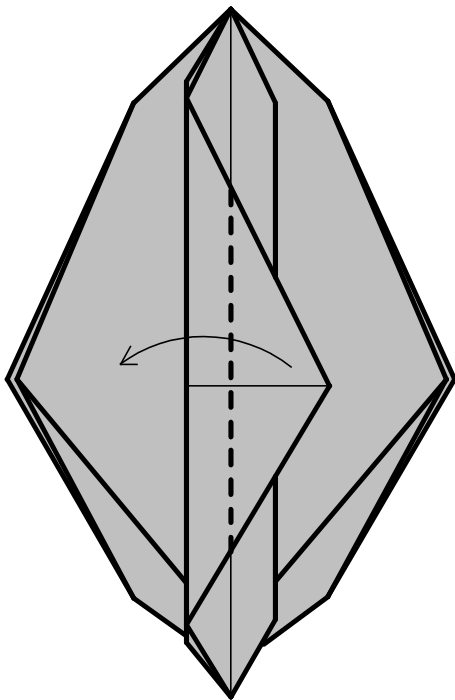
Repeat steps 21 through 23 in mirror image on the right.

26.



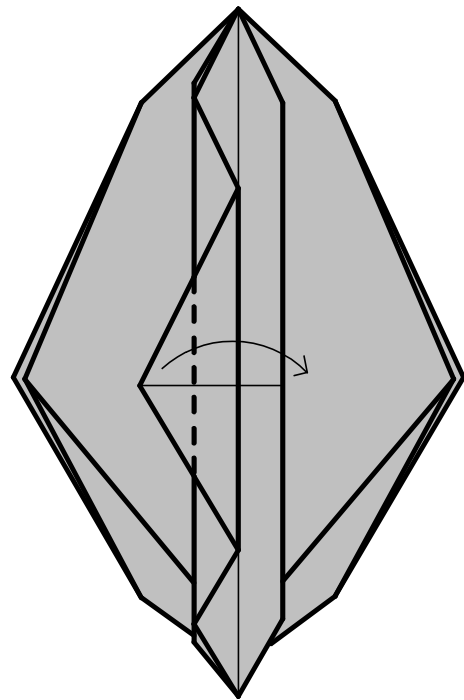
Valley fold the flap back to the right so that the fold lies along the folded edge in step 24.

27.



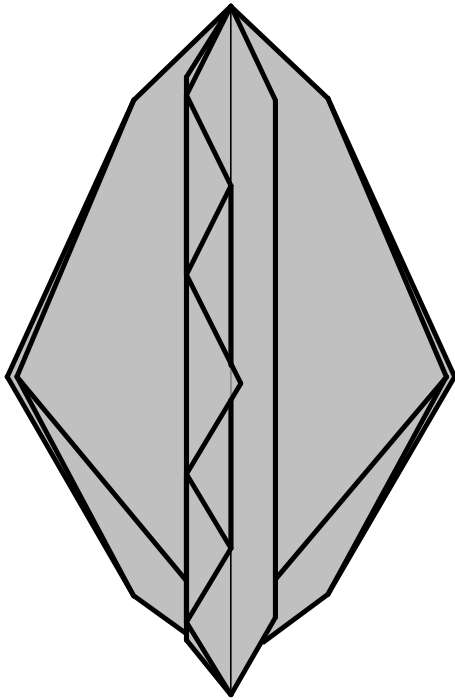
Valley fold the flap back to the left so that the fold lies along the center line.

28.



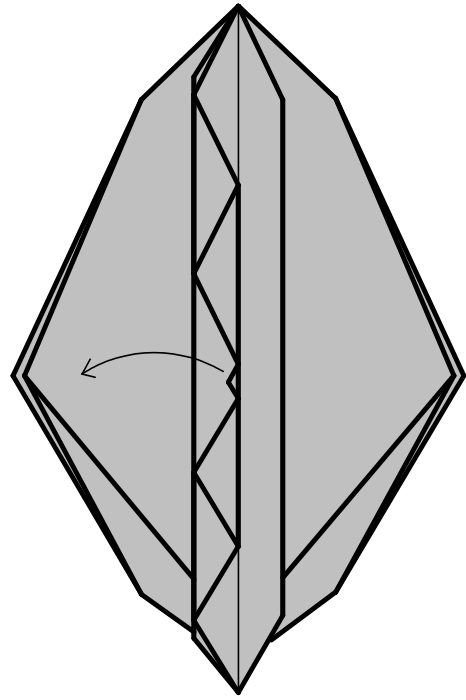
Valley fold the flap back to the right so that the fold lies along the folded edge in step 24.

29.



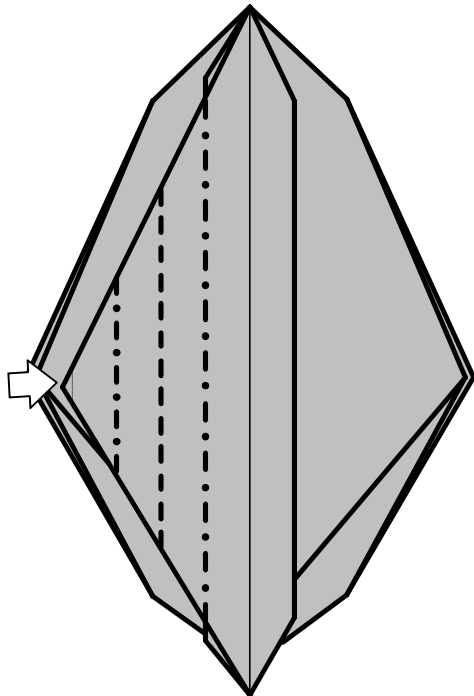
Valley fold the small corner back to the left one more time so that the fold lies along the center line.

30.



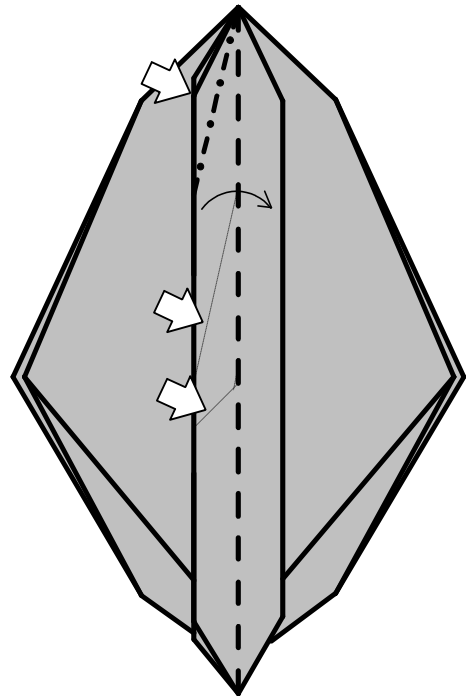
Unfold the flap.

31.



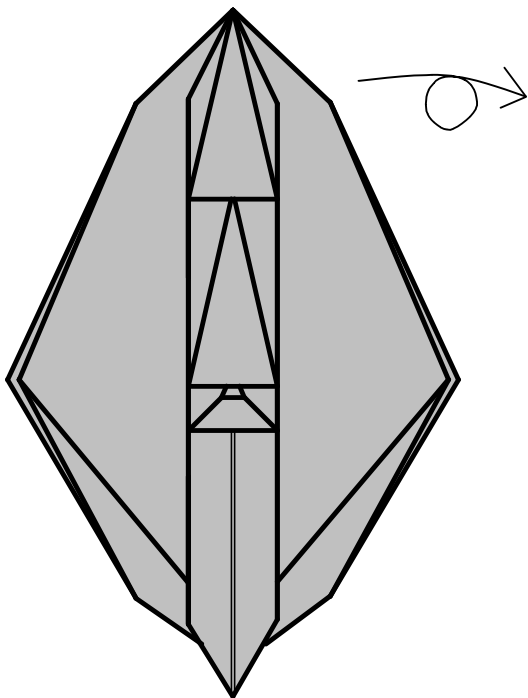
Sink in and out on existing creases.

32.



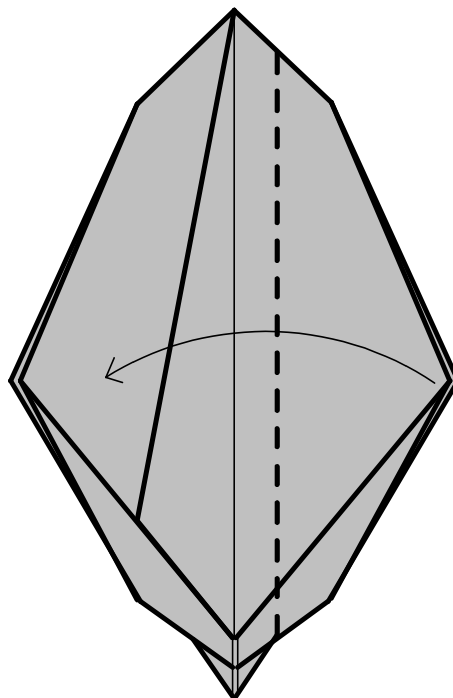
Spread the layers from the open sink in step 31 evenly. Three squash folds are necessary to do this.

33.



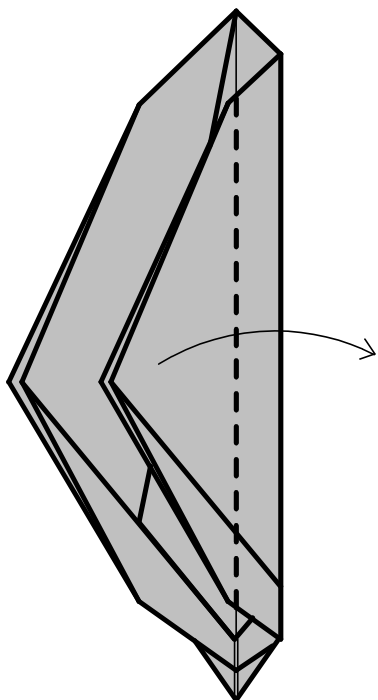
Turn over.

34.



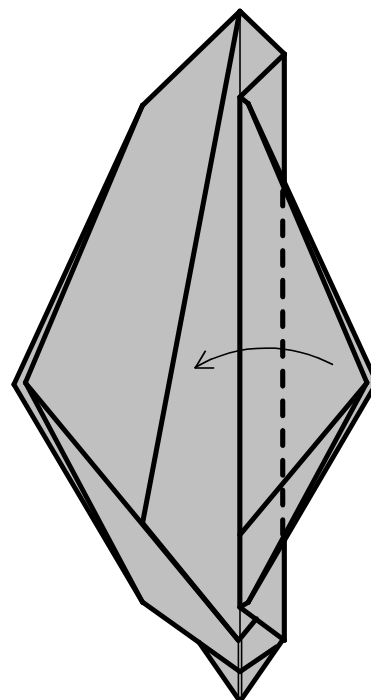
Fold the flap to the left through all the remaining layers so that the fold lines up with the edges behind.

35.



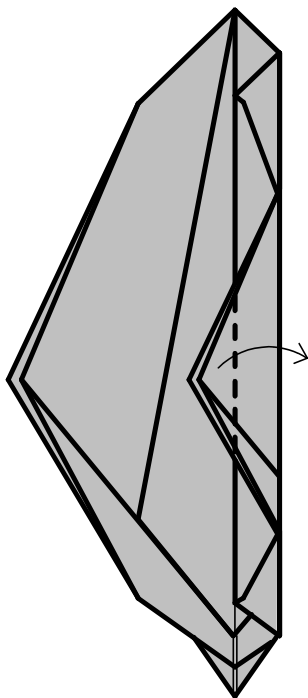
Fold the flap back to the right so that the fold lies along the center line.

36.

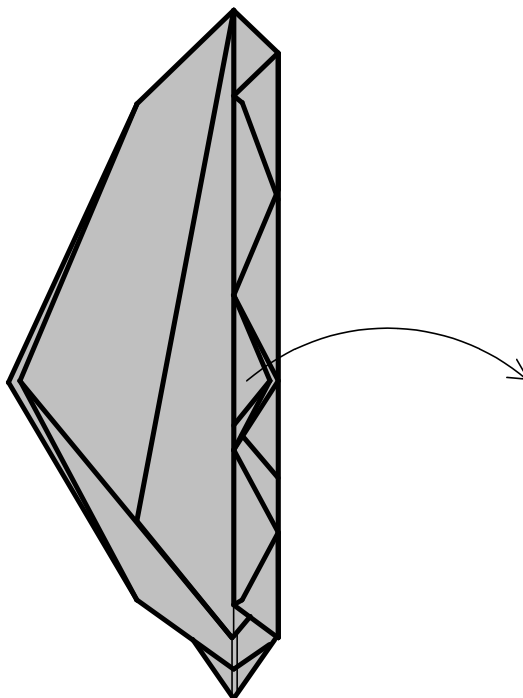


Fold two flaps back to the left so that the fold lines up with the edges behind.

37.



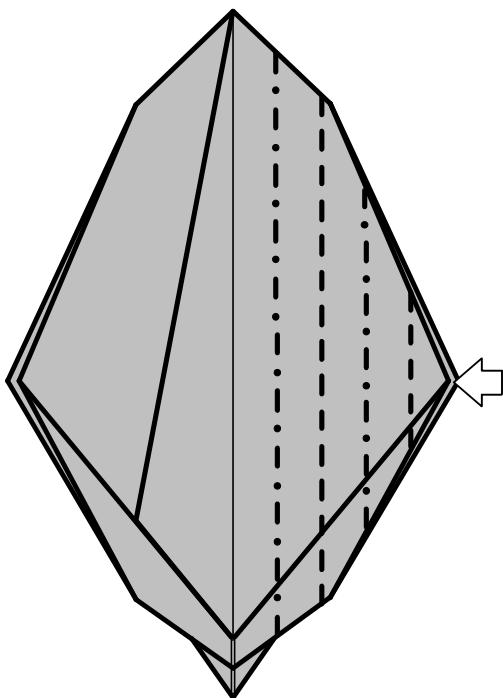
38.



Fold two flaps back to the right one more time so that the fold lies along the center line.

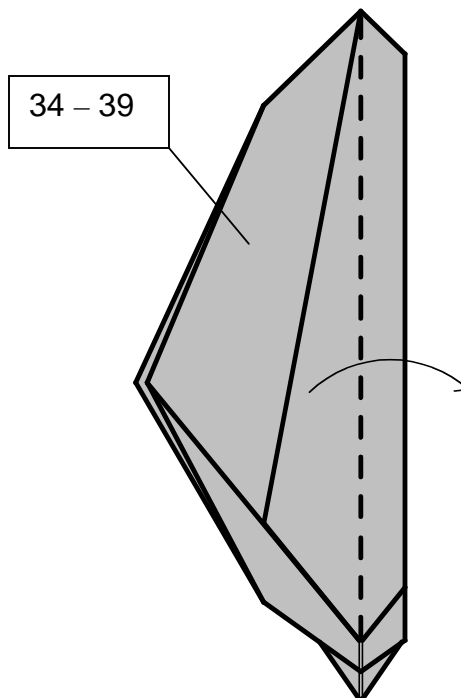
Unfold to step 34.

39.



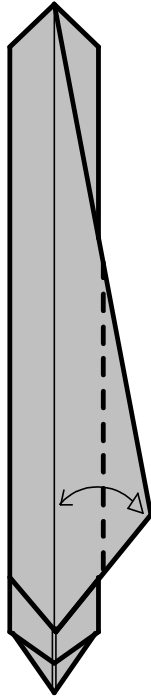
Open sink all layers in and out on existing creases.

40.



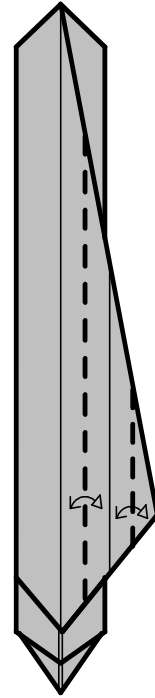
Swing the narrow flap to the right and repeat steps 34 through 39 in mirror image on the left.

41.



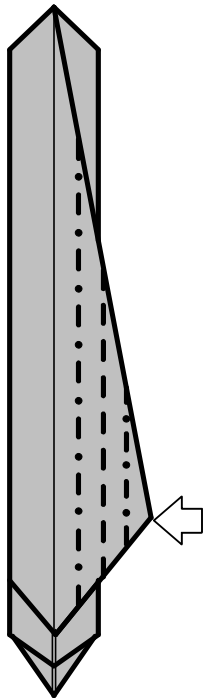
Fold and unfold the corner to the center line.

42.



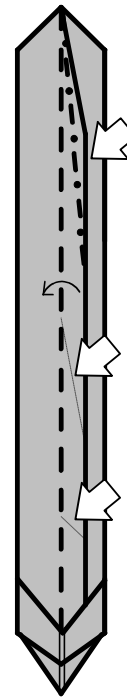
Fold and unfold in two places.

43.



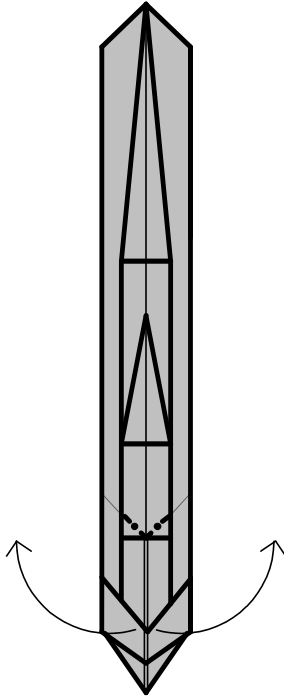
Open sink in and out on existing creases.

44.



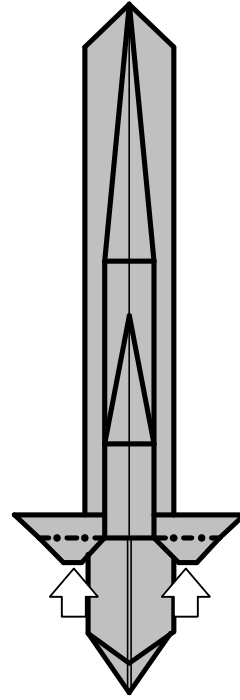
Spread the layers from the open sink from step 43 evenly. Three squash folds are necessary to do this.

45.



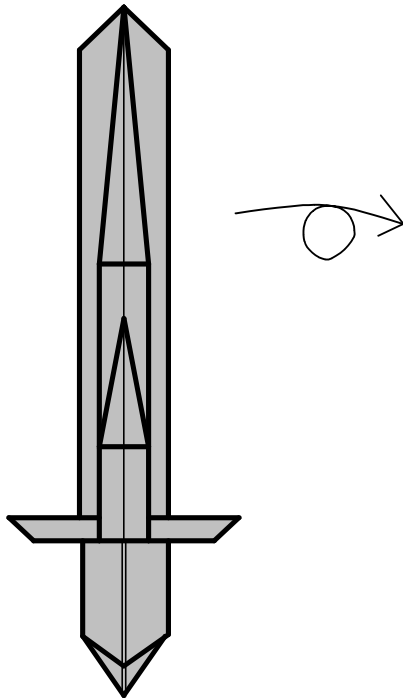
Inside reverse fold the points as far as possible so that they are perpendicular to the center line.

46.



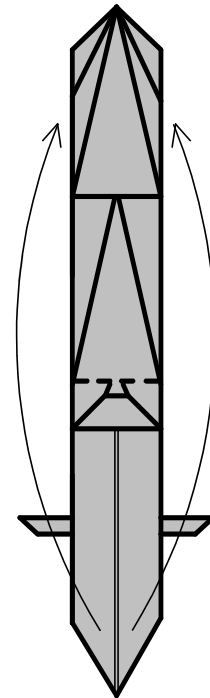
Thin the flaps with inside reverse folds.

47.



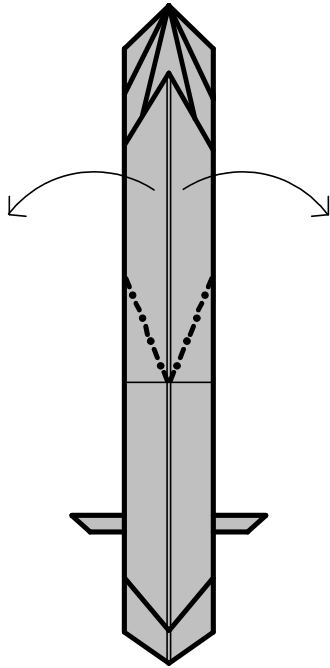
Turn over.

48.



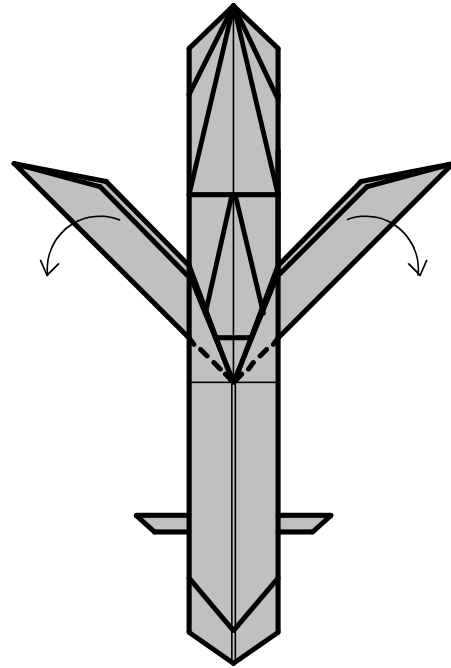
Fold a pair of points as far up as possible.

49.



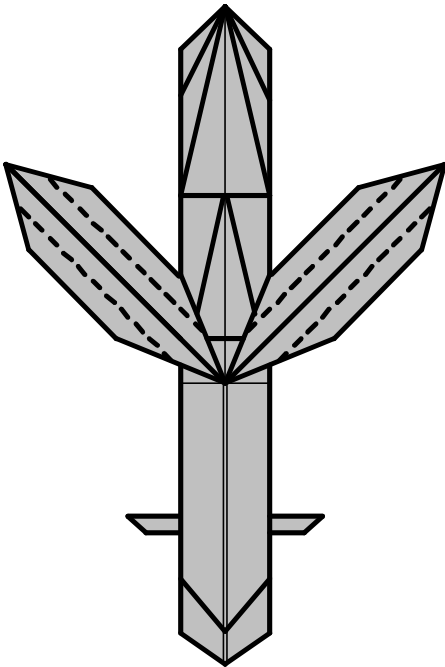
Inside reverse fold the flaps to the side. This is at 22.5° to the center line (divide the angle into fourths).

50.



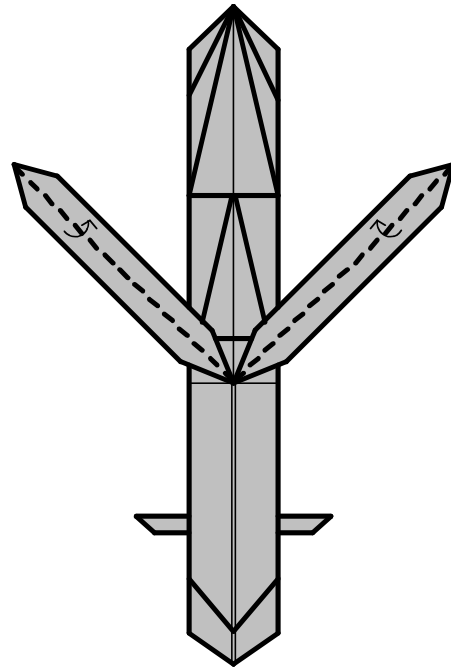
Open the flaps.

51.



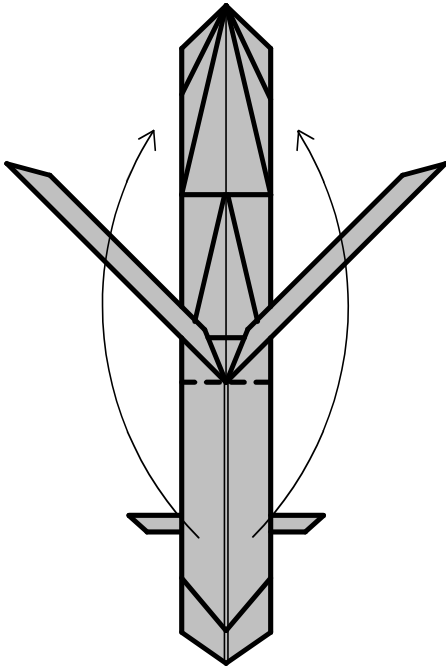
Fold the edges of the flaps to the center line.

52.



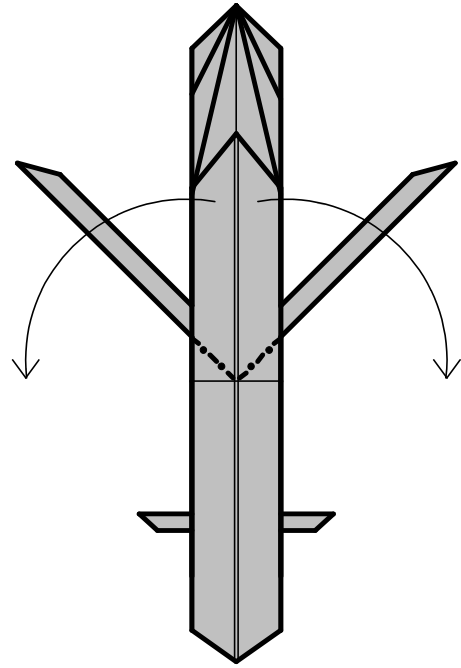
Close the flaps back up.

53.



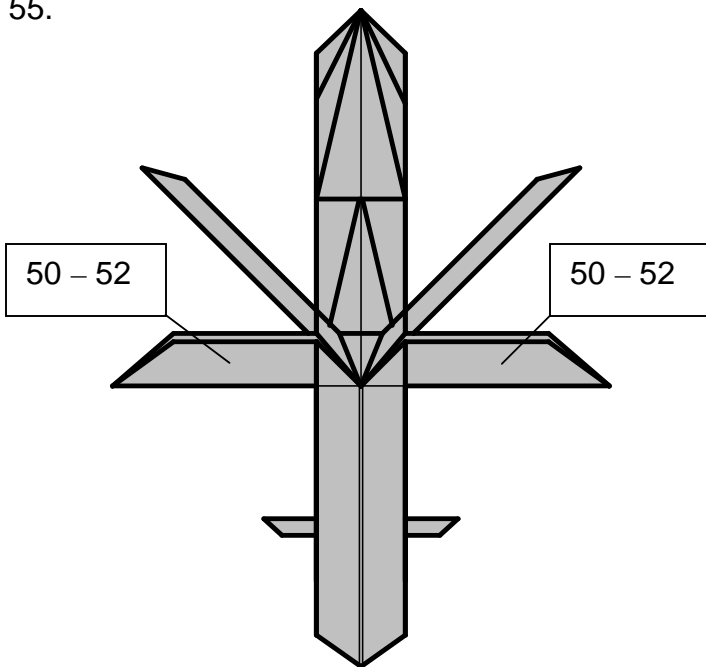
Fold the next pair of points as far up as possible.

54.



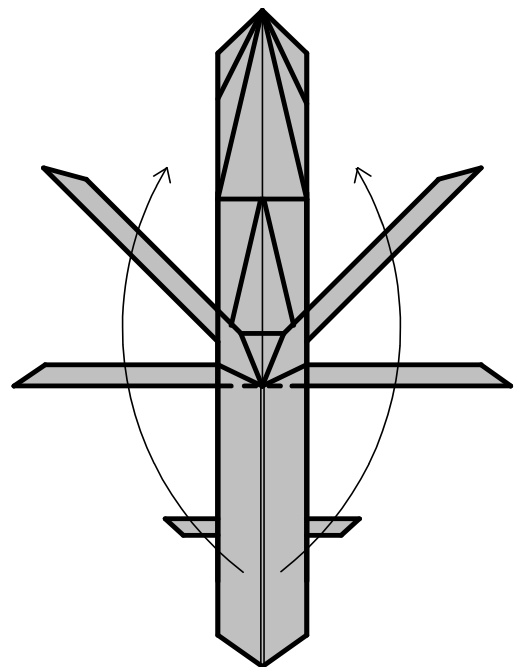
Inside reverse fold the flaps downward so that they are perpendicular to the center line.

55.



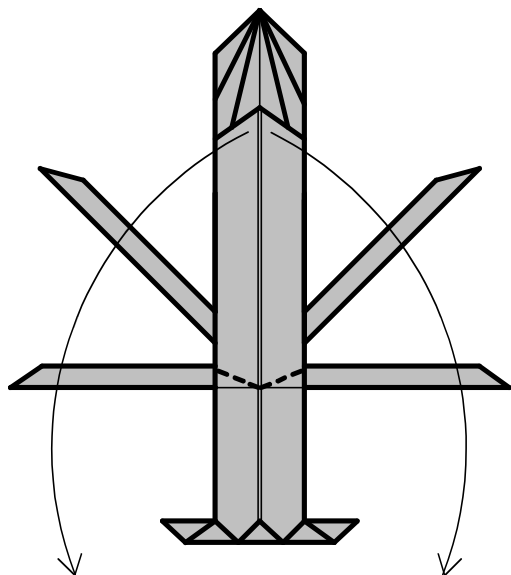
Repeat steps 50 through 52 to narrow this pair of flaps.

56.



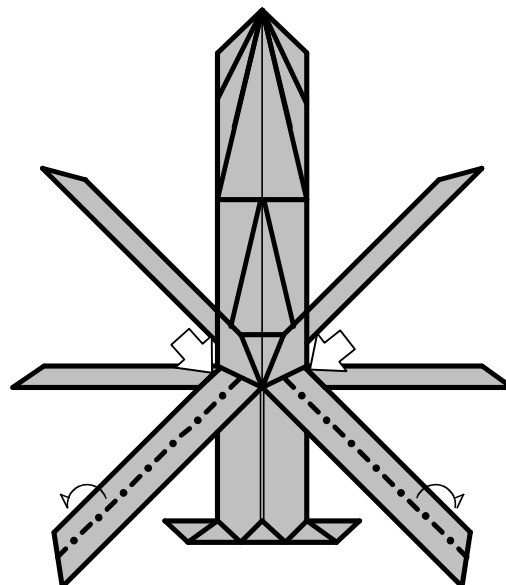
Fold the last pair of points as far up as possible.

57.



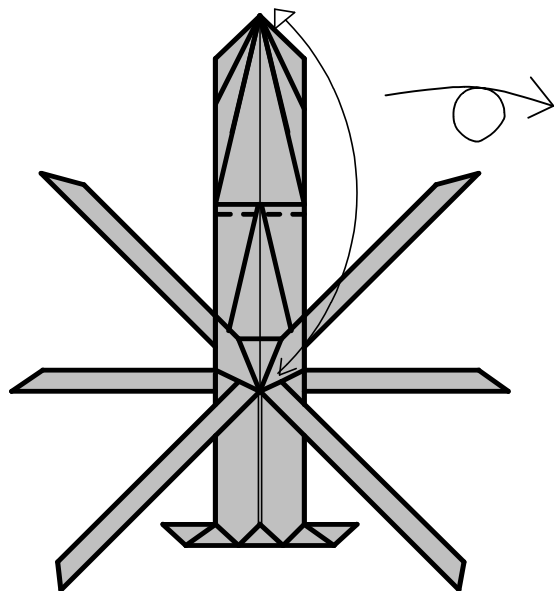
Valley fold the pair of points downward. This fold makes a 67.5° angle with the center line (again, divide the angle into fourths).

58.



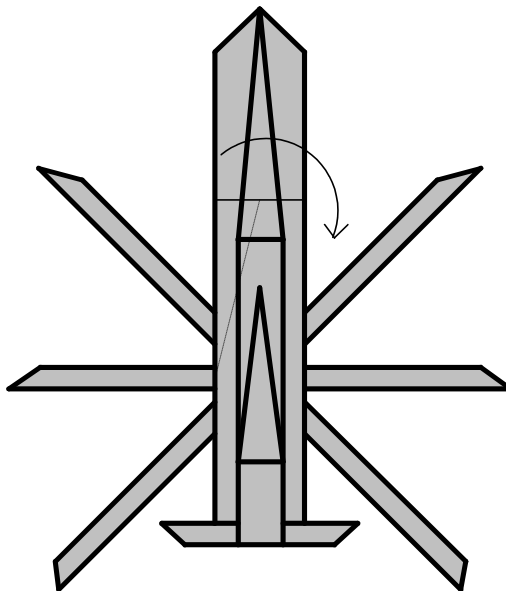
Mountain fold the edges to narrow the flaps, reverse folding where the flap joins the body.

59.



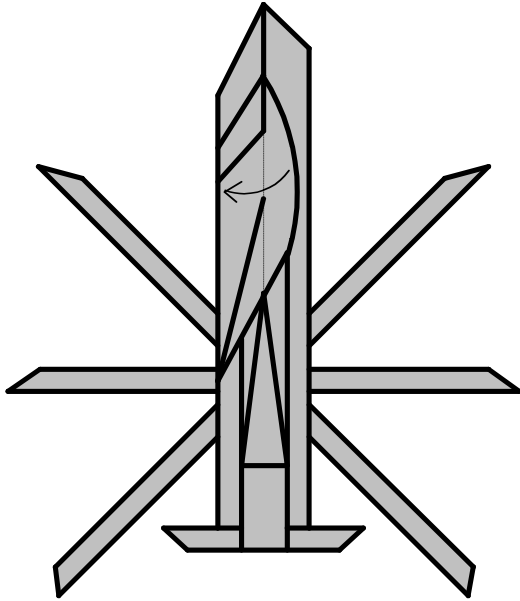
Fold and unfold the abdomen in half then turn over.

60.



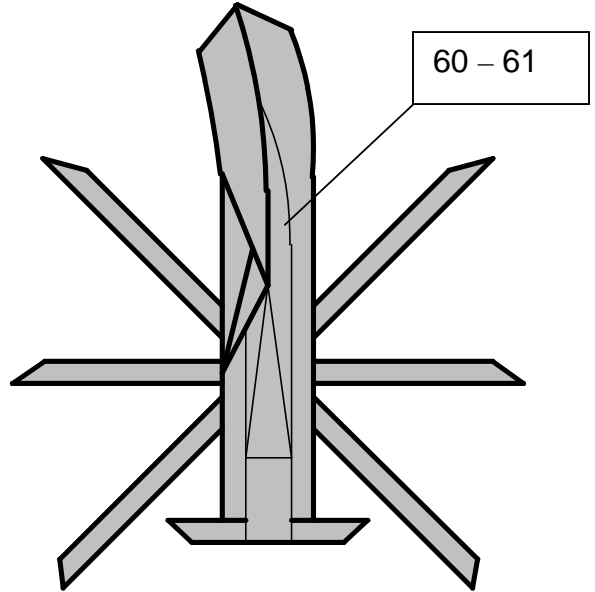
Make a valley fold through a single layer from the point where the middle pair of legs joins the body to the center of the crease from step 59. The model will not lie flat.

61.



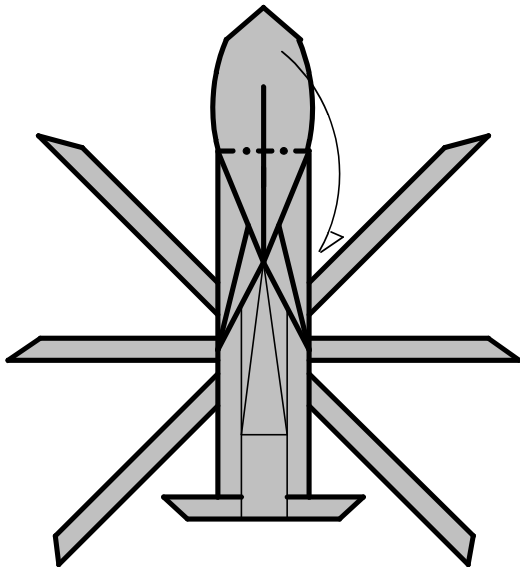
Fold the layer back to the left so that the fold lies along the center line. The model will still not lie flat.

62.



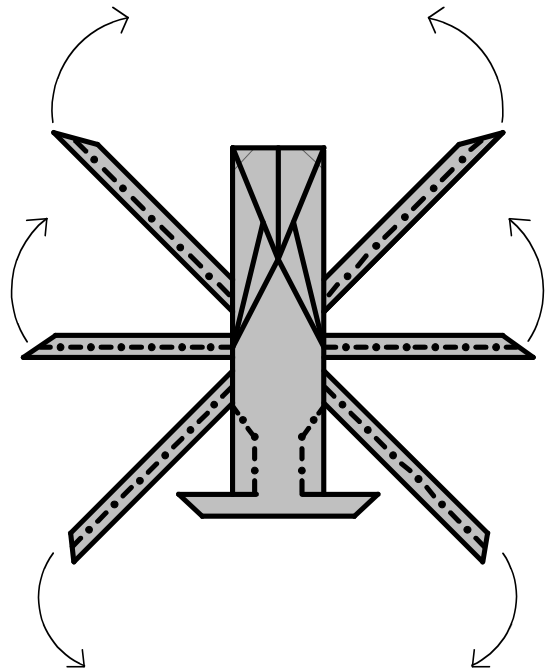
Repeat steps 60 and 61 in mirror image on the other side. The model will still not lie flat.

63.



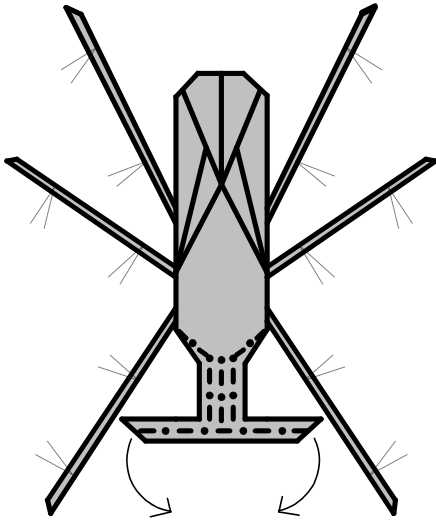
Mountain fold the abdomen behind on the crease from step 59 – you will have to change the flap from concave to convex to do this. Flatten the abdomen while preserving the X-shaped pattern on the back. Tuck the flap underneath into a pocket between the hind legs.

64.



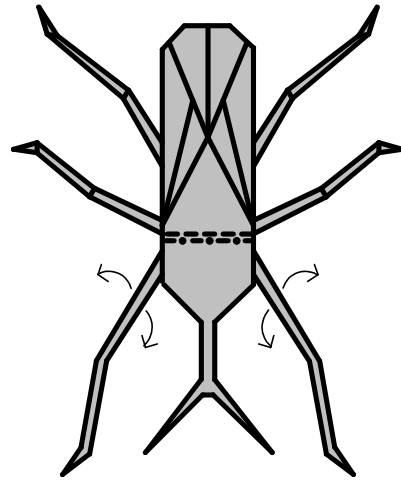
Reverse fold the corners of the abdomen. Pinch the legs in half with mountain folds while swinging two pairs of legs toward the abdomen and one pair toward the head. Narrow the neck with mountain folds.

65.



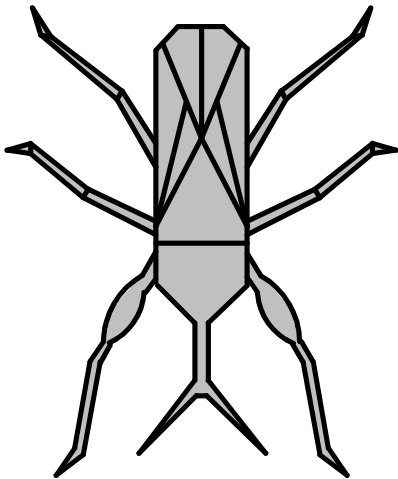
Shape all six legs with two crimps each (first down, then back up to form the feet). Pinch the antennae in half while swinging them forward. Narrow the neck with more mountain folds, then pinch it in half (keep the antennae up and toward the sides while pinching the neck in half).

66.



Pull out paper from the first segment of each foreleg to create bulges. Pinch the antennae in half again (the surface is perpendicular to the diagram, so these folds are not shown). Make a small pleat in the top layers to separate the abdomen and thorax.

67.



Finished Long Necked Seed Bug.