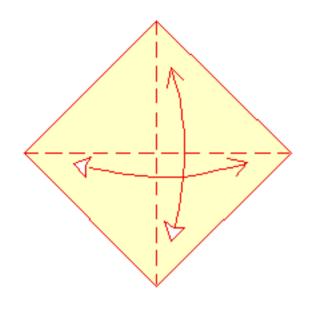
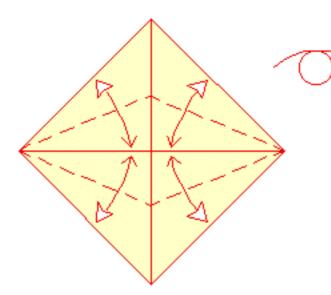
Spined Ant

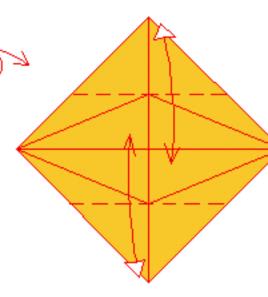
©Hans Birkeland 1997 Use foil-backed paper



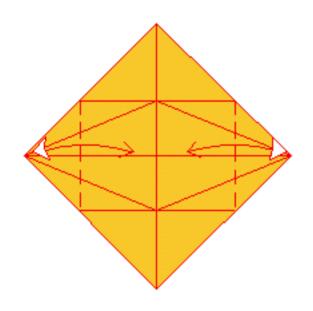
1 Begin with the white side up. Fold and unfold the diagonals.



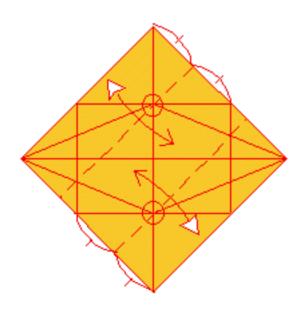
2 Fold and unfold the angle bisectors. Turn the paper over.



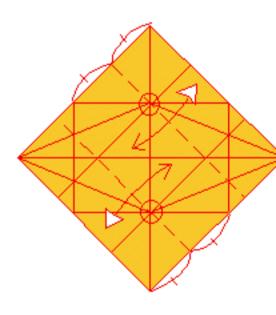
3 Fold and unfold.



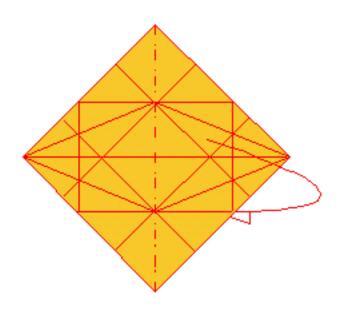
f 4 Fold and unfold.



5 Fold and unfold.



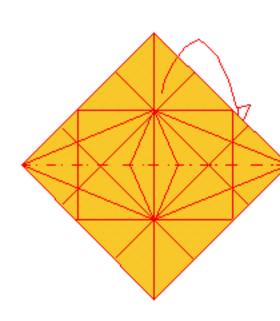
6 Fold and unfold.



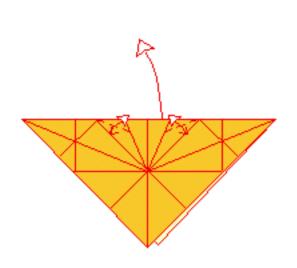
7 Mountain-fold behind.



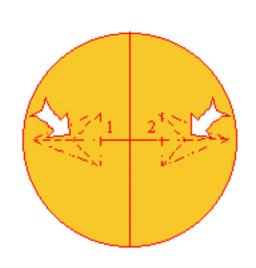
Fold and unfold the angle bisectors through both layers. Unfold to step 7.



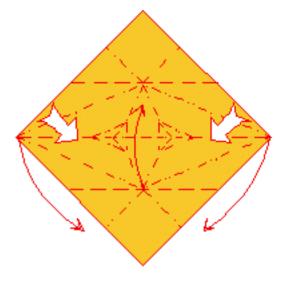
9 Mountain-fold behind.



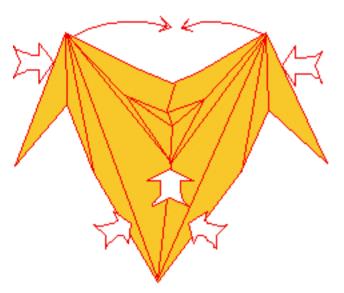
10 Fold and unfold the angle bisectors through both layers. Unfold.



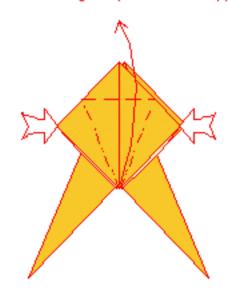
11 Enlarged view. Make the two vertical mountain-folds and then start pushing in the area within the triangles (see next step).



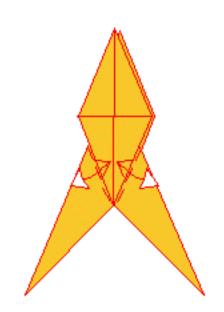
12 Collapse on excisting creases. Next step shows this step seen from the side.



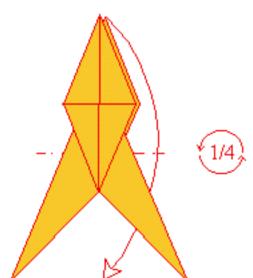
13 Step 12 seen from the side, partially collapsed.



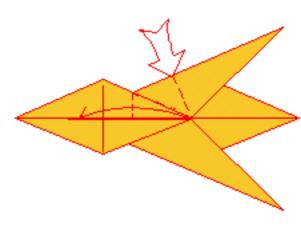
14 Petal-fold. Repeat behind.



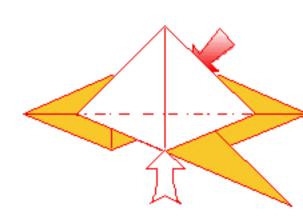
15 Fold and unfold through all layers.



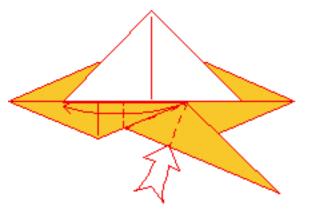
16 Fold the flap at the back down as far as it will go. Rotate the model.

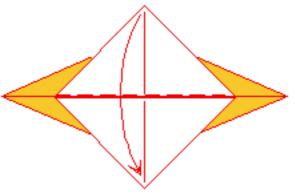


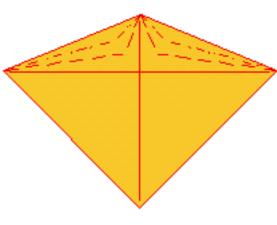
17 Swivel-fold. Repeat on the right, thus being able to squash flat (see next step).



18 Like this. Closed-sink the lower triangle upward.



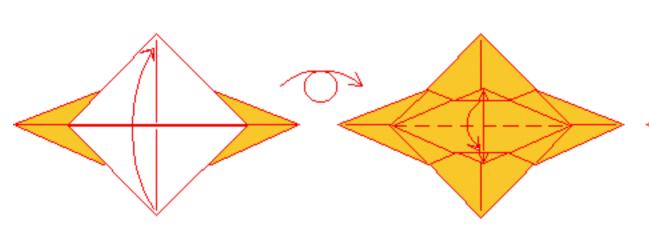


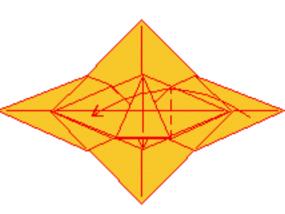


19 Repeat steps 17-18 on the lower flap.

20 Fold the upper flap down.

21 Enlarged view of the center flap.
Pre-crease the upper part, dividing in thirds. Then unfold to step 20.

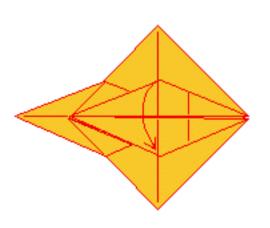


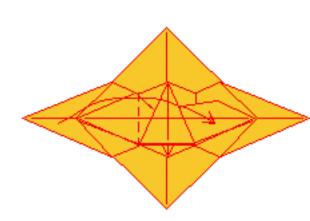


Repeat steps 20-21 on the lower flap.
Turn the model over.

23 Valley-fold one edge down.

24 Fold the right flap to the left as far as it will go.

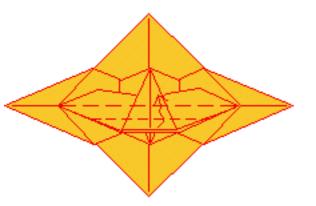


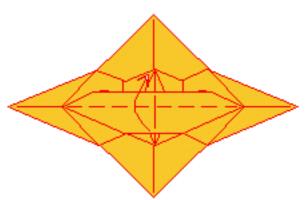


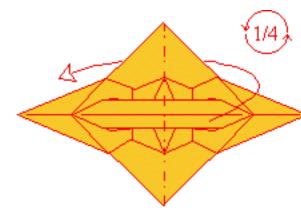
 $25 \;\; \mathsf{Fold} \; \mathsf{down} \; \mathsf{one} \; \mathsf{layer}.$

Open-sink the edge on the angle bisector. Then refold to step 24.

27 Repeat steps 24-26 on the top left.



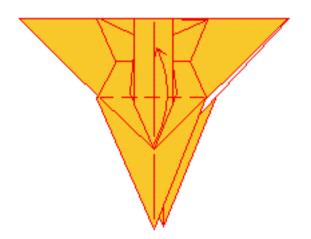




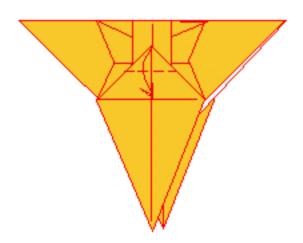
 $28 \;\; \mathsf{Fold} \; \mathsf{over} \; \mathsf{and} \; \mathsf{over}.$

29 Repeat steps 23-28 below.

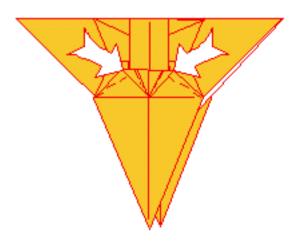
30 Mountain-fold in half. Rotate.



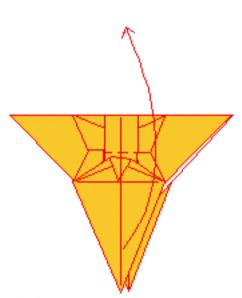
 $31 \ \ \forall \text{alley-fold.}$



32 Valley-fold.



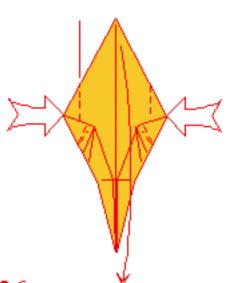
33 Swivel-fold.



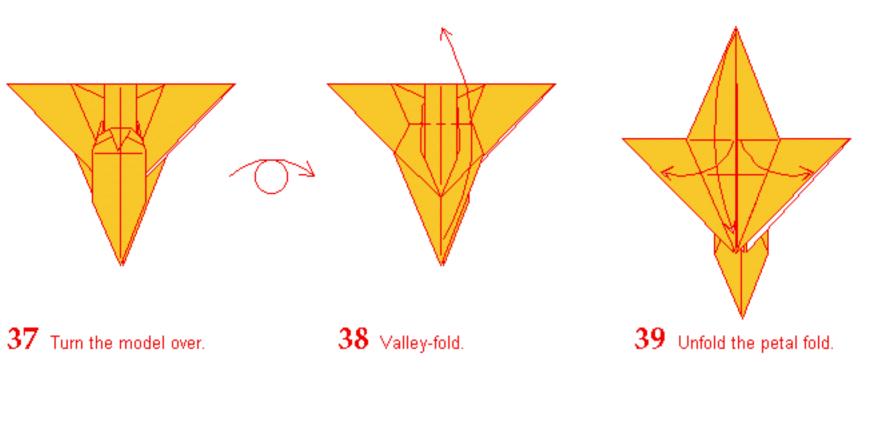
 $34 \ \ \forall \text{alley-fold.}$

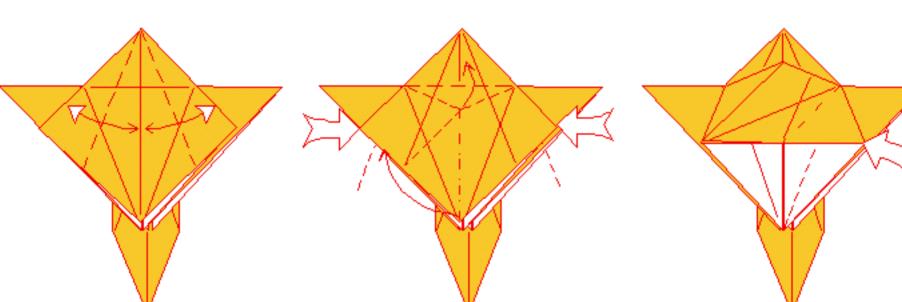


35 Fold in the edges as the large flap is folded down. See next step.

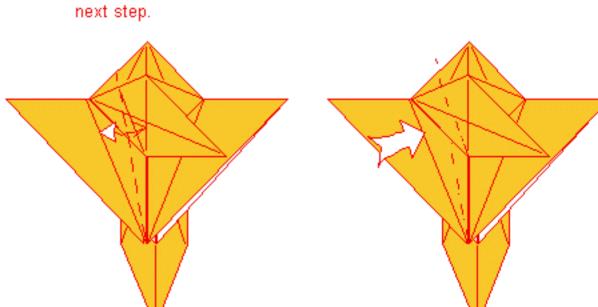


36 In mid-air. Swivel-fold. Continue folding the flap down.





41 Squeeze the sides together and swing the bottom flap 42 Reverse-fold. 40 Fold and unfold. over to the left. See

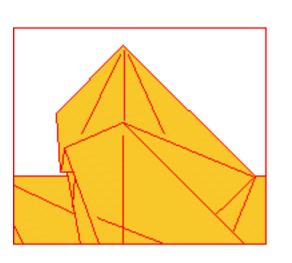




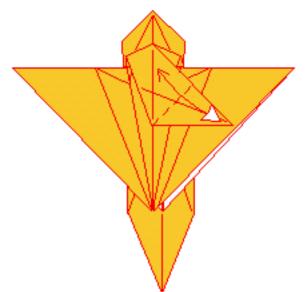
 $\begin{array}{c} 43 \\ \text{to the right, and repeat step} \end{array}$ 42 on the left side.

44 Fold and unfold.

45 Open sink.



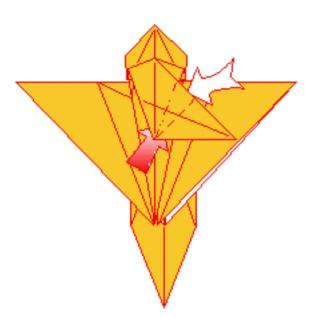
46 Detail of sink. Repeat steps 44-45 on the left side.



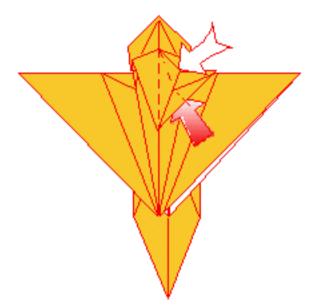
47 Fold and unfold the angel bisector.



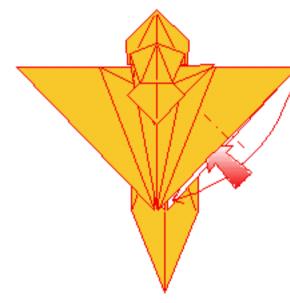
48 Fold and unfold the angle bisector.



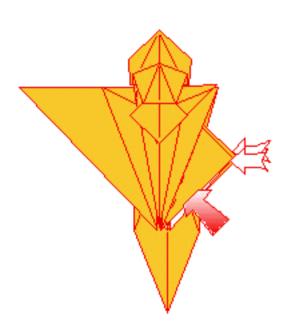
49 Reverse-fold in and out.



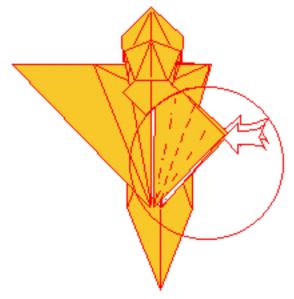
 $50 \ \, \text{Spread-squash.}$



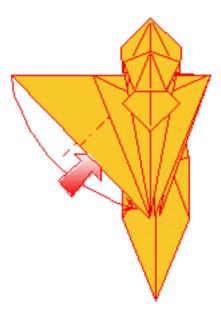
51 Reverse-fold.



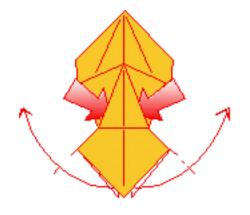
52 Reverse-fold two edges. Then unfold.



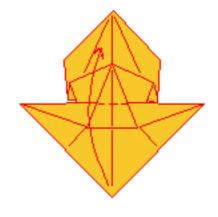
53 Cut-away view. Reverse-fold each edge three times. The valley fold is on the crease made in step 52.



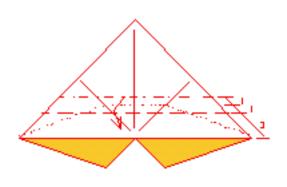
54 Repeat steps 51-53 on the left flap. This is easier if the right flap is unfolded during the process.



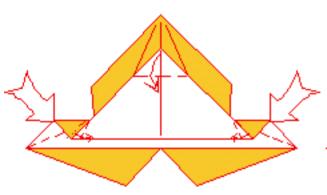
55 Enlarged view of the head. Reverse-fold the antennae to each side as far as they will go.



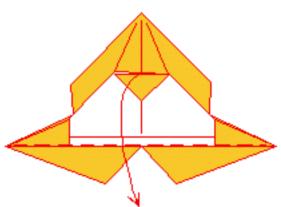
56 Lift the flap upward without pressing flat.



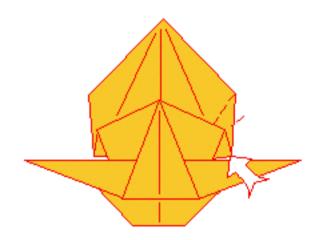
Pleat-fold. The divisions, using the edge behind, are approximate.



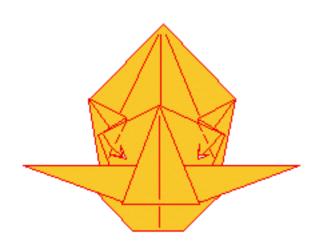
58 Swivel-fold the sides. Valley-fold the top corner.



59 Fold down.



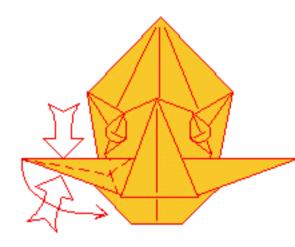
60 Reverse-fold. Repeat on the left side.



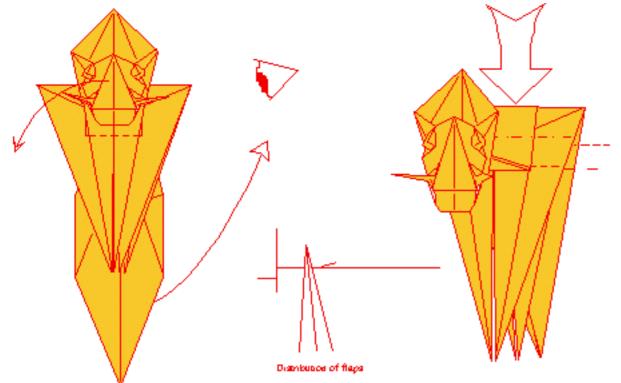
61 Valley-fold.



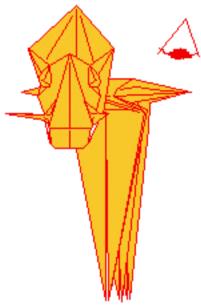
62 Open up the eyes and squash flat.



63 Rabbit-ear the antennae so that they point straight out toward you.

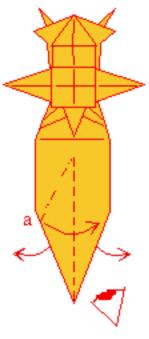


64 Lift the flap at the back and fold the head to the front. Next view from the right side.

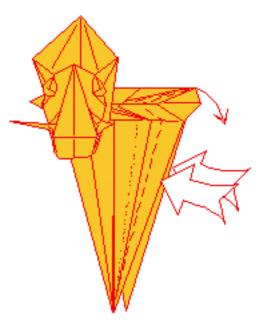


67 Like this. Next view from top of back-body.

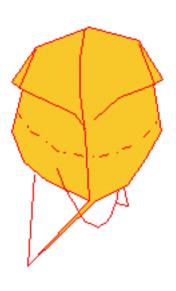
65 The back-body is not shown. Squash the thick edge flat.



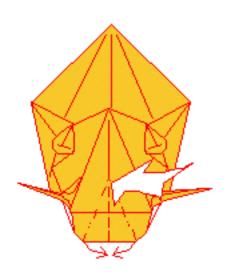
Open up the edges below and fold corner a over to the right. The body becomes 3-dimensional.



66 Collapsing on the creases made in step 21, put the two edges inside the nearest pockets. The resulting point will point slightly downward. Repeat behind.



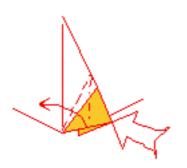
69 View from behind. Fold the edge inside.



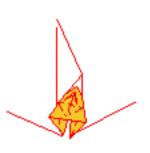
70 Detail of head.

Push in where indicated. Press the jaws together and fold the resulting edge to the left at the back-side.

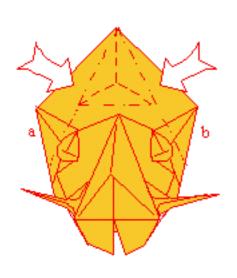
Next view from behind the jaws.



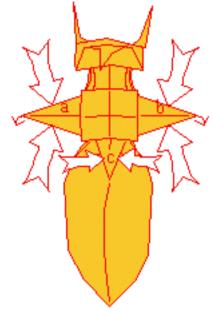
71 Squash-fold.



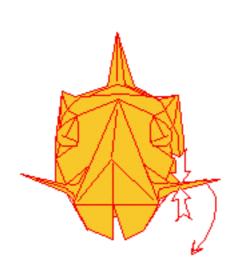
72 Petal-fold.



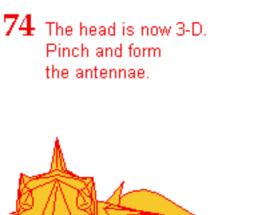
73 Collapse to make a point partly on existing creases. Edge a and b will point straight backward.

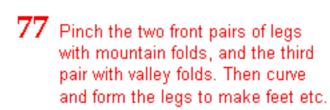


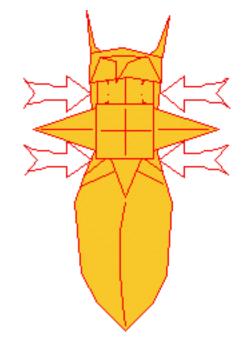
76 Pinch points a, b and c. Point c should be slightly raised.



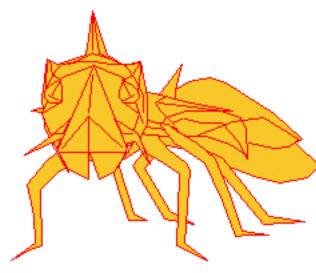
Pinch and form the antennae.



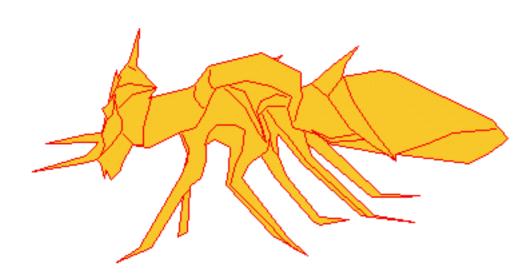




Pinch between the head and mid-body, and between the mid-body and back-body.



78 The finished Spined Ant.



Side view.