

Hummingbird

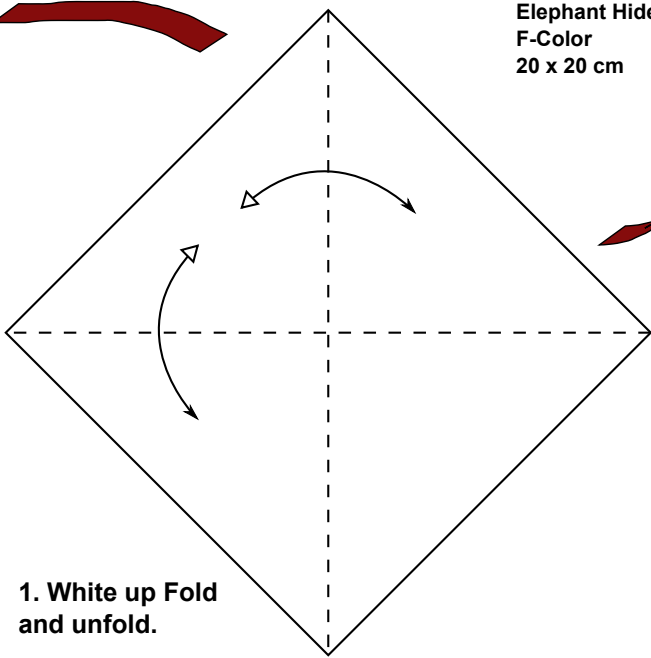
by Alexander Kurth

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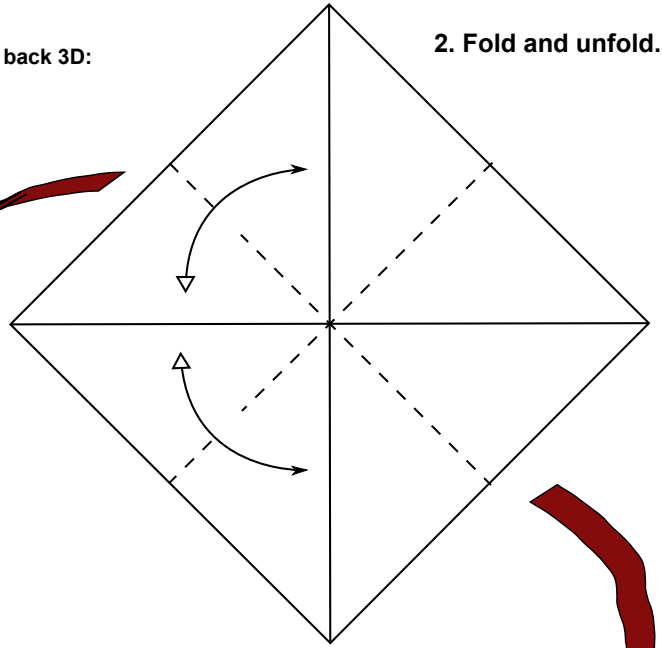
Recommended paper to form the back 3D:

Tissue-Foil
Elephant Hide
F-Color
20 x 20 cm

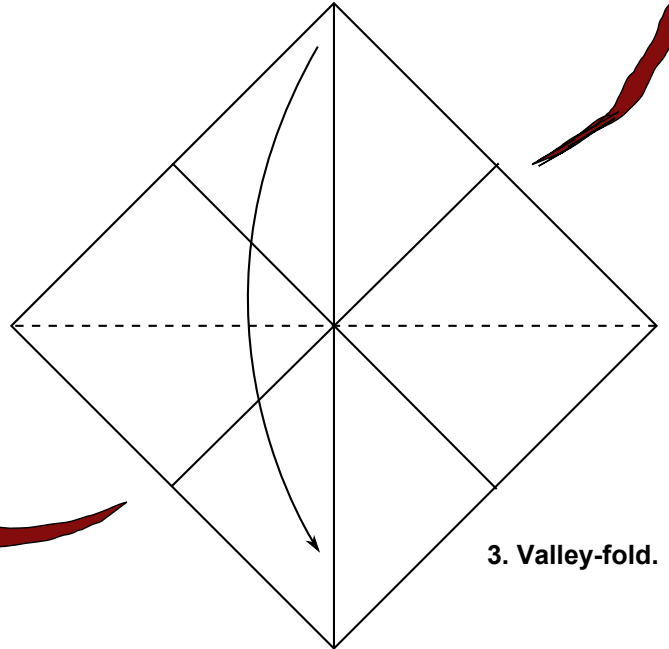
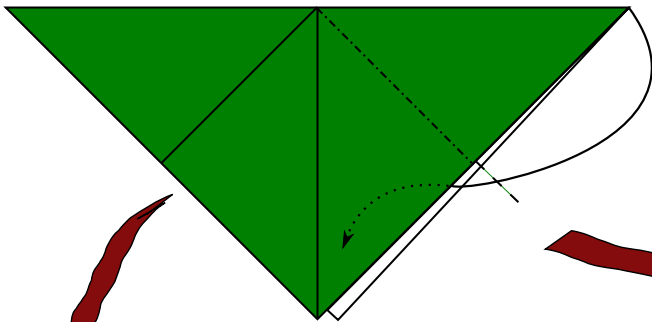
2. Fold and unfold.



1. White up Fold and unfold.

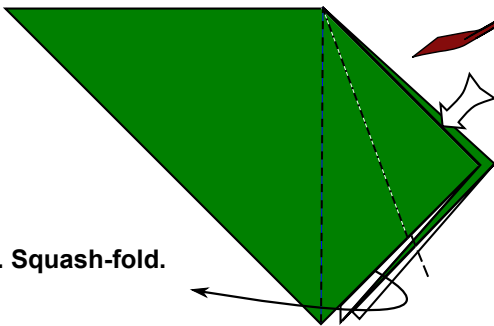


4. Reverse-fold the edge.

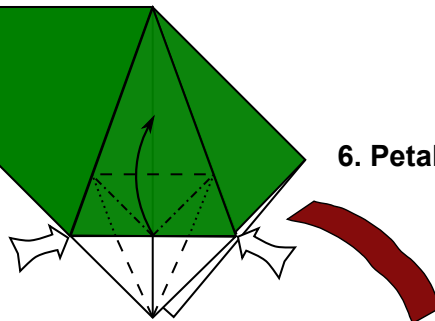


3. Valley-fold.

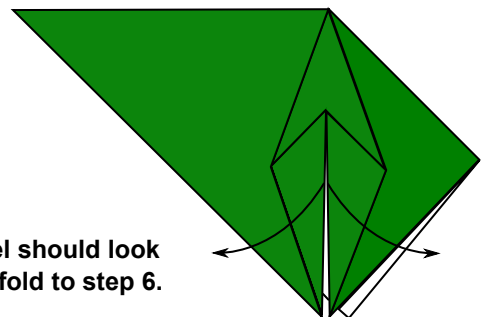
5. Squash-fold.



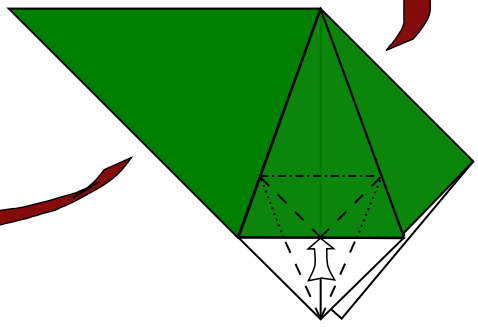
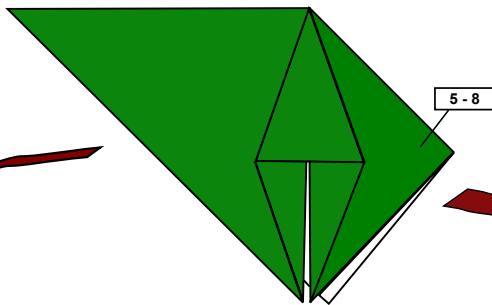
6. Petal-fold.



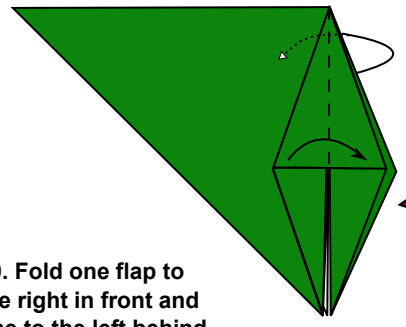
7. The model should look like this. Unfold to step 6.



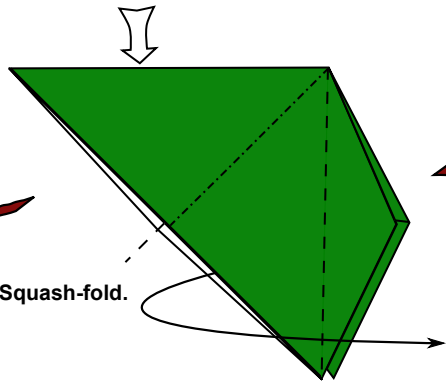
9. Repeat Steps 5 - 8 behind.



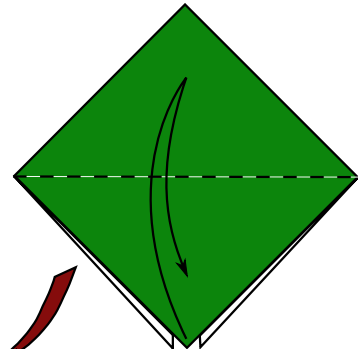
8. Fold the existing creases as shown and sink the tip.



10. Fold one flap to the right in front and one to the left behind.

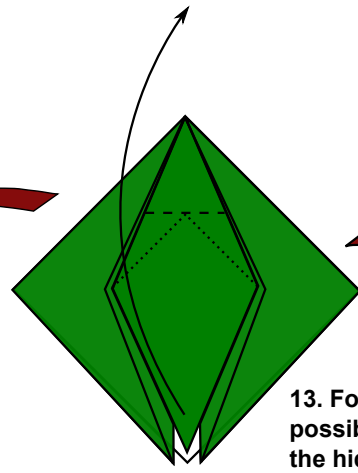
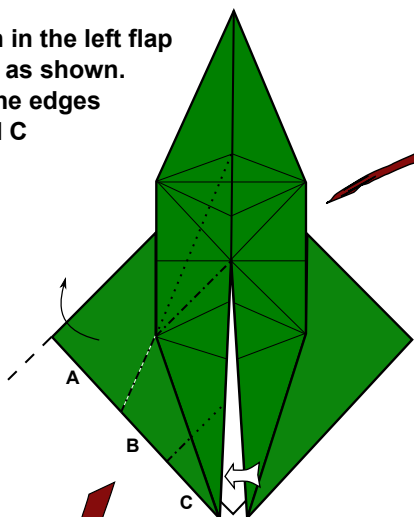


11. Squash-fold.

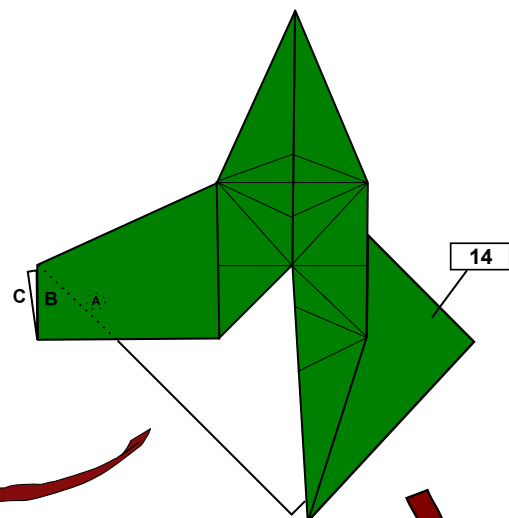
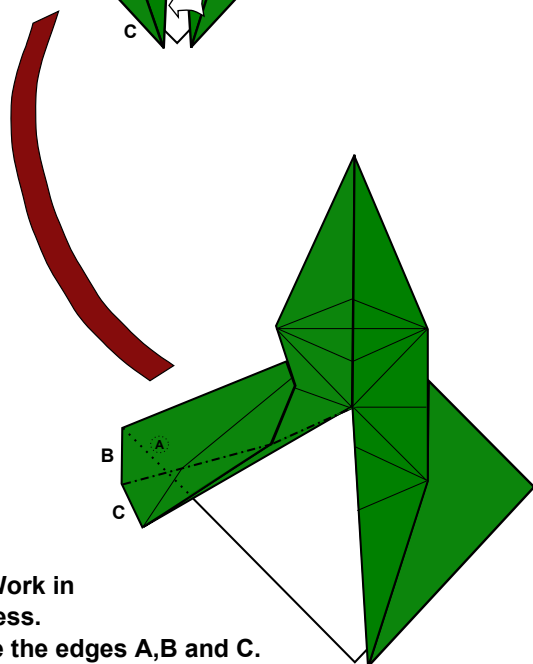


12. Fold and unfold. Then turn the model over.

14. Push in the left flap and fold as shown. Notice the edges A, B and C



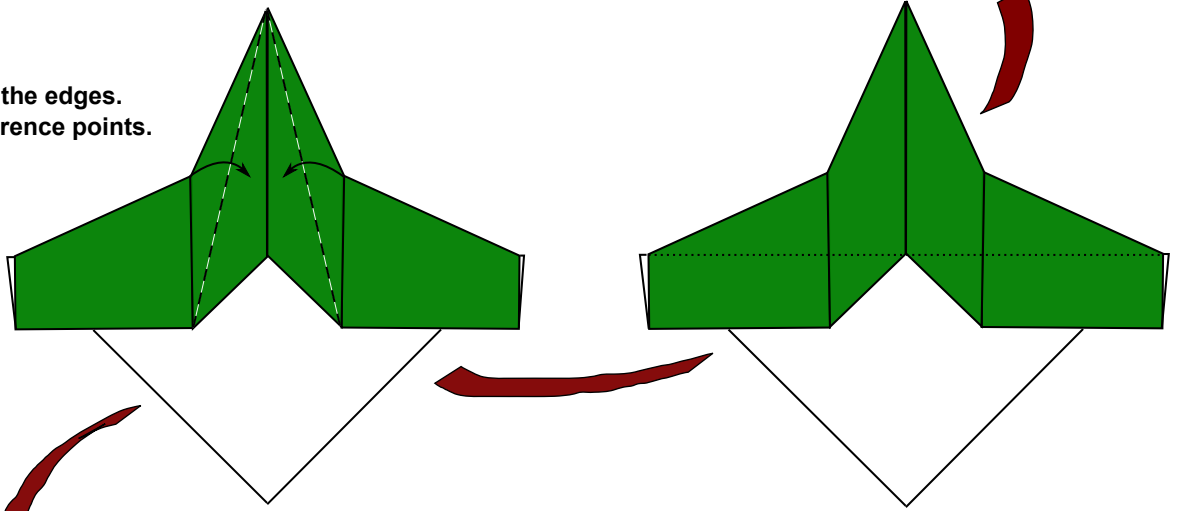
13. Fold the flap up as far as possible while squash-fold the hidden layers.



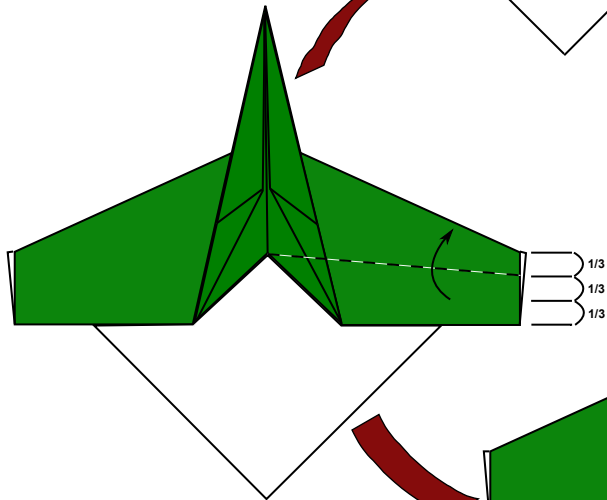
14a. Work in progress. Notice the edges A,B and C. A is hidden. C comes between A and B.

15 The model should look like this. B and C should overlap each other. Repeat step 14 on the right.

17. Valley-fold the edges.
Notice the reference points.

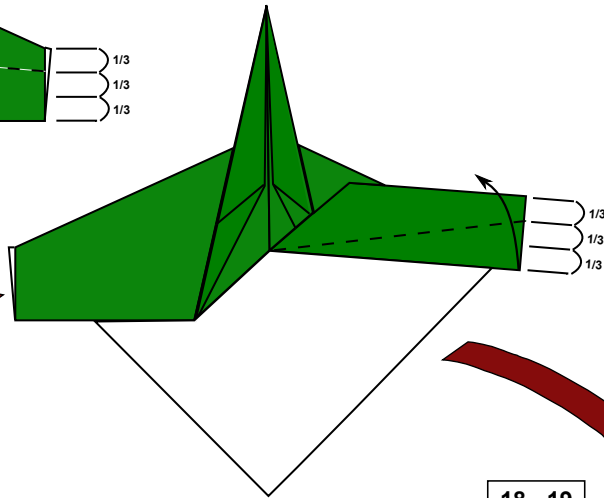


16. The model should look like this. Notice the position of the hidden layers.



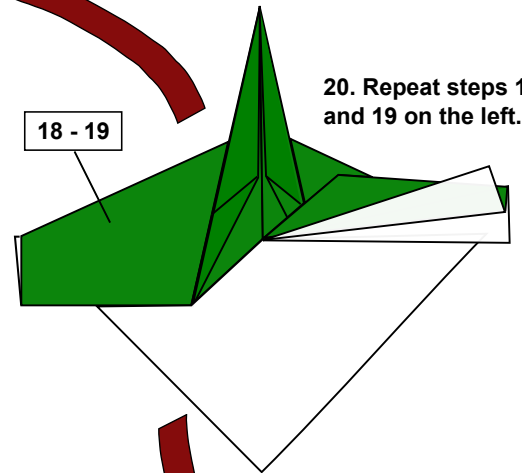
18. Valley-fold as shown.
But only the first layer.
The hidden flap will flip out.

19. Valley-fold only the top layer.

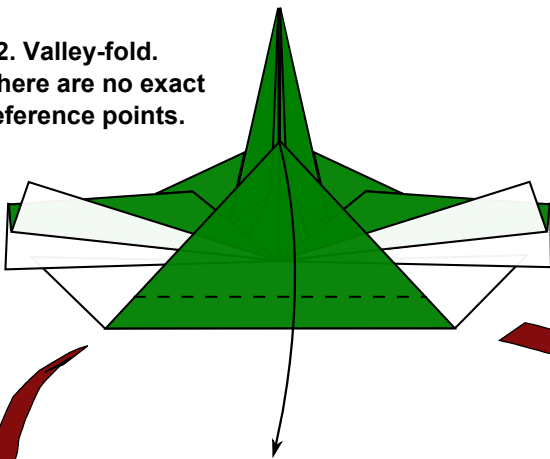


20. Repeat steps 18 and 19 on the left.

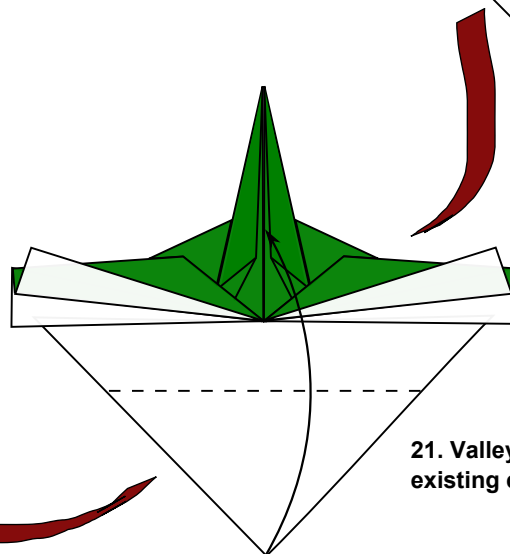
18 - 19

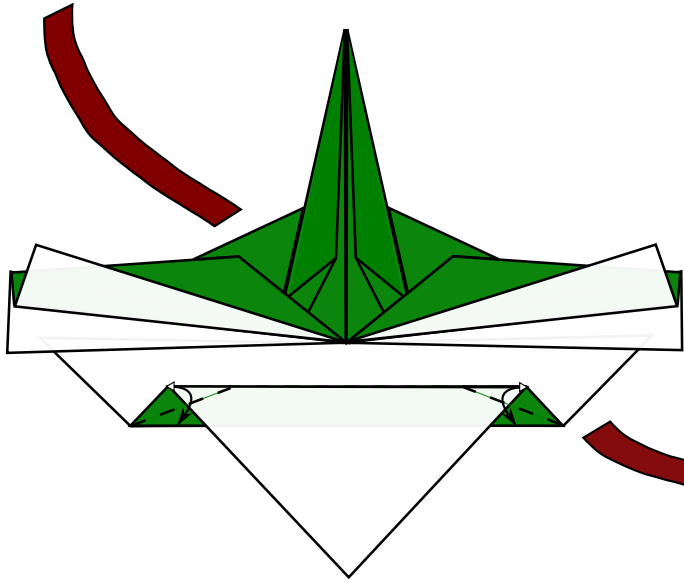


22. Valley-fold.
There are no exact
reference points.

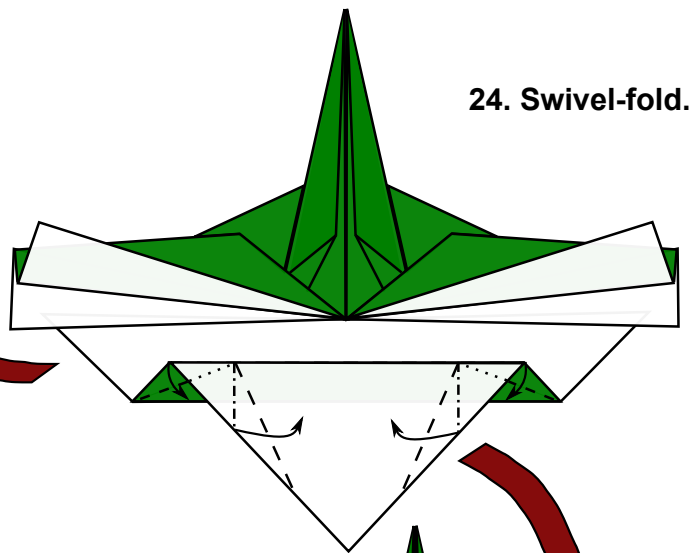


21. Valley-fold on the
existing crease.

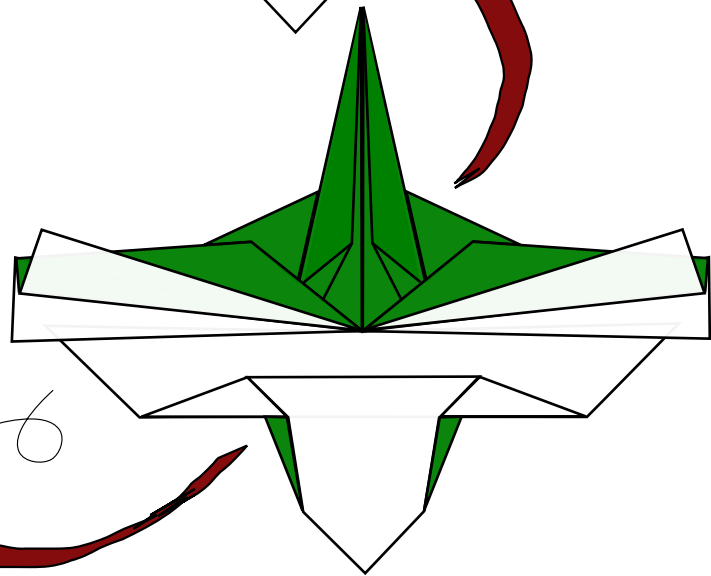




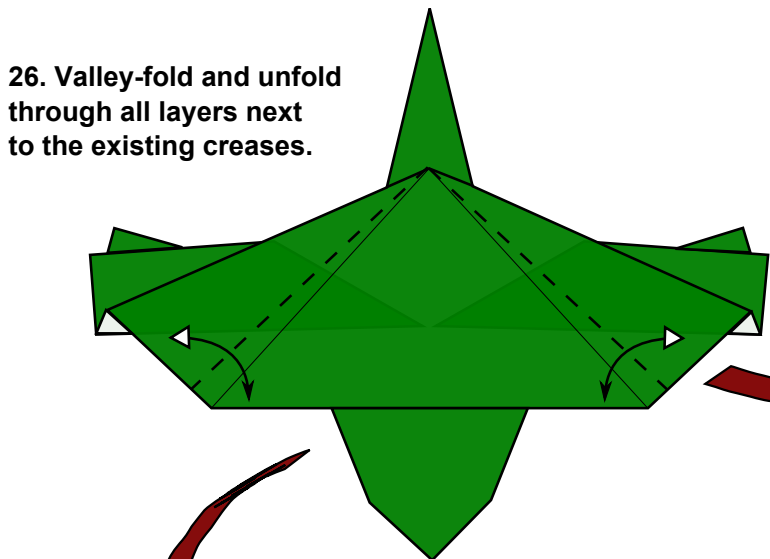
23. Fold and unfold an angle bisector.



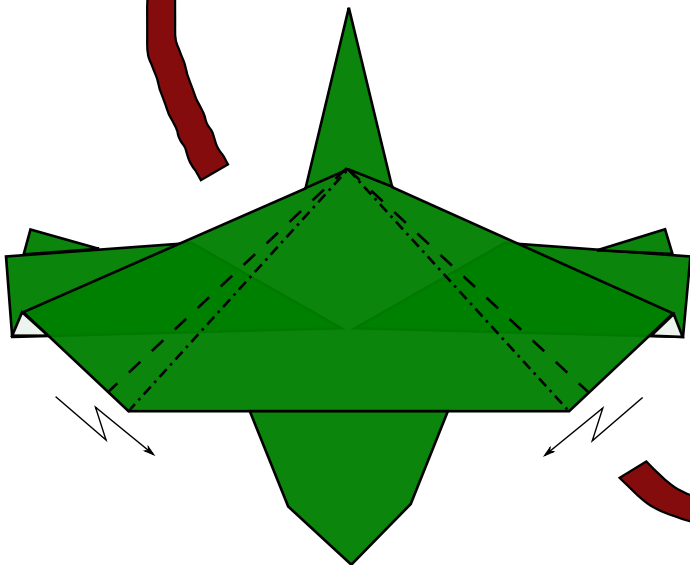
24. Swivel-fold.



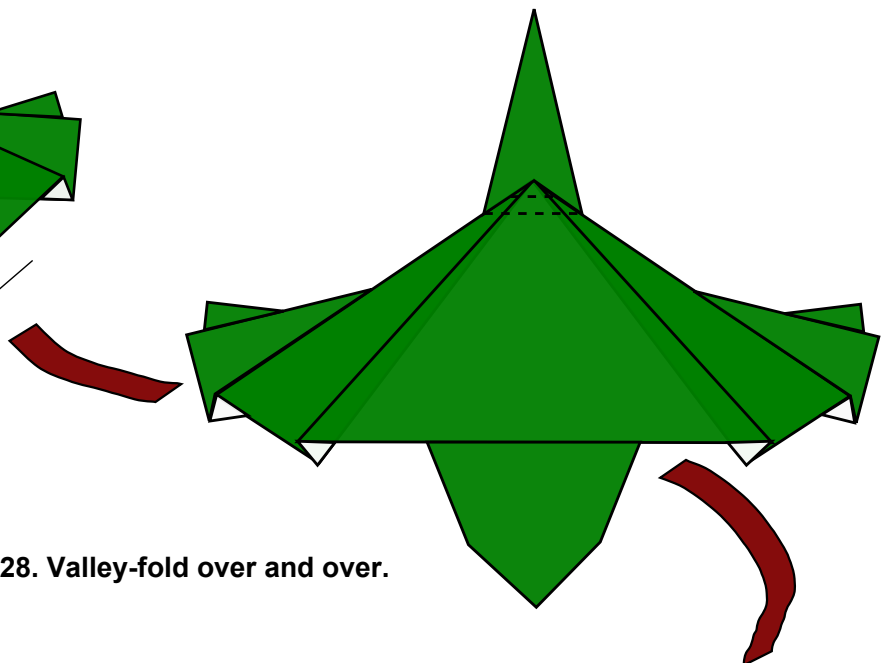
25. The model should look like this. Turn it over.



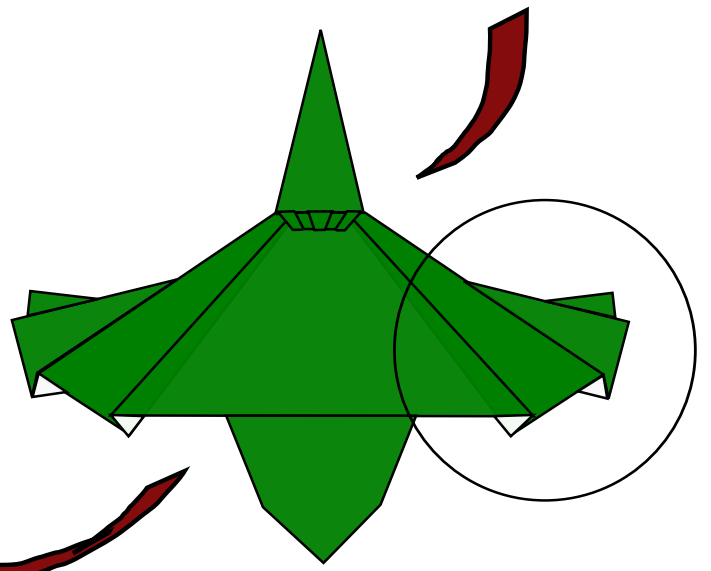
26. Valley-fold and unfold through all layers next to the existing creases.



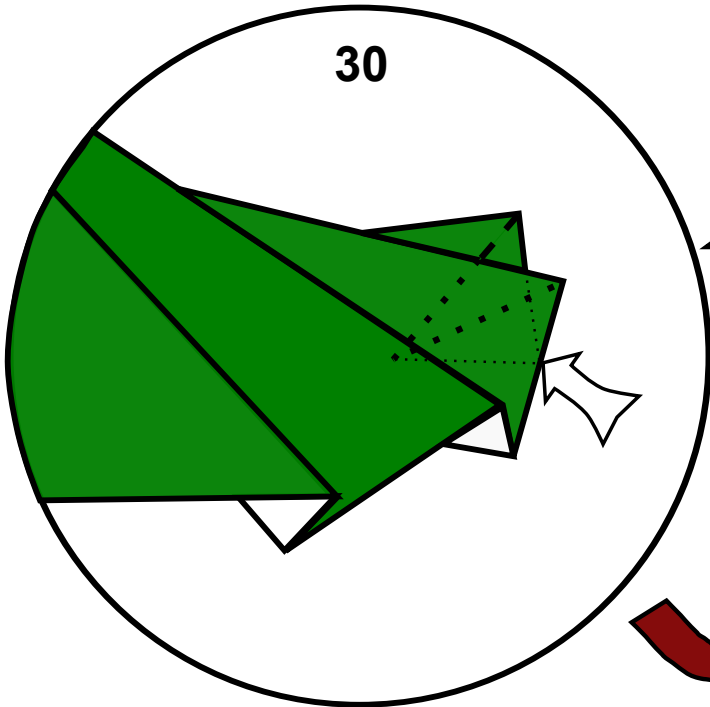
27. Crimp-fold through all layers.



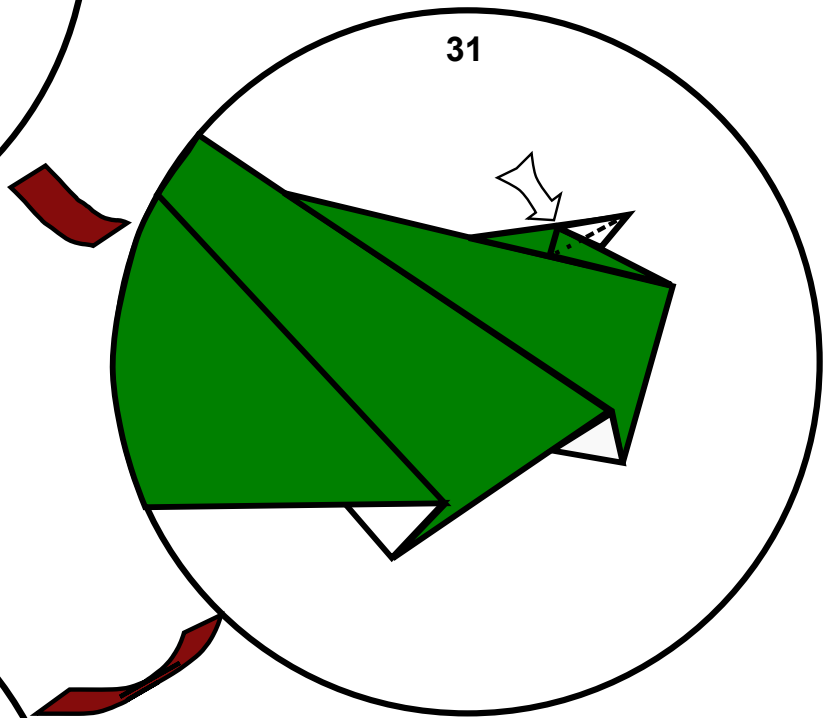
28. Valley-fold over and over.



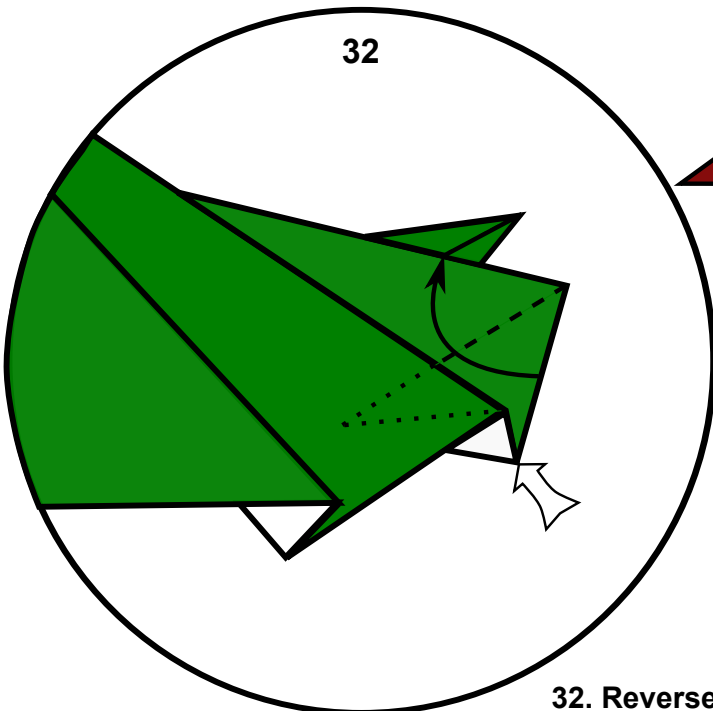
29. Next steps are focused at the wing.



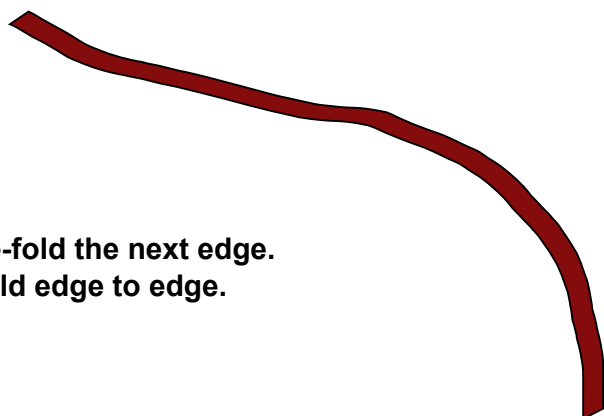
30. Reverse-fold the hidden edge. Note that the crease on the back flap is already done.



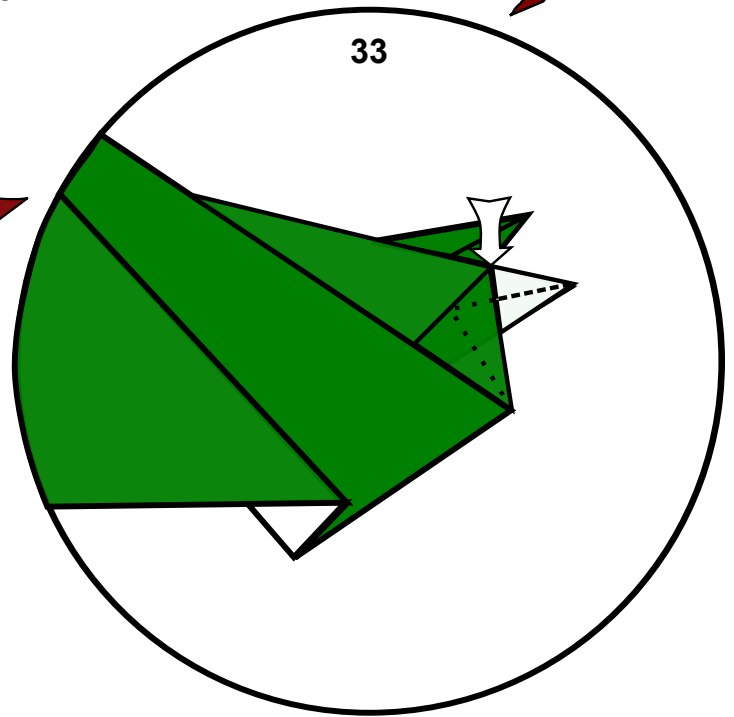
31. Reverse-fold half of the flap back.



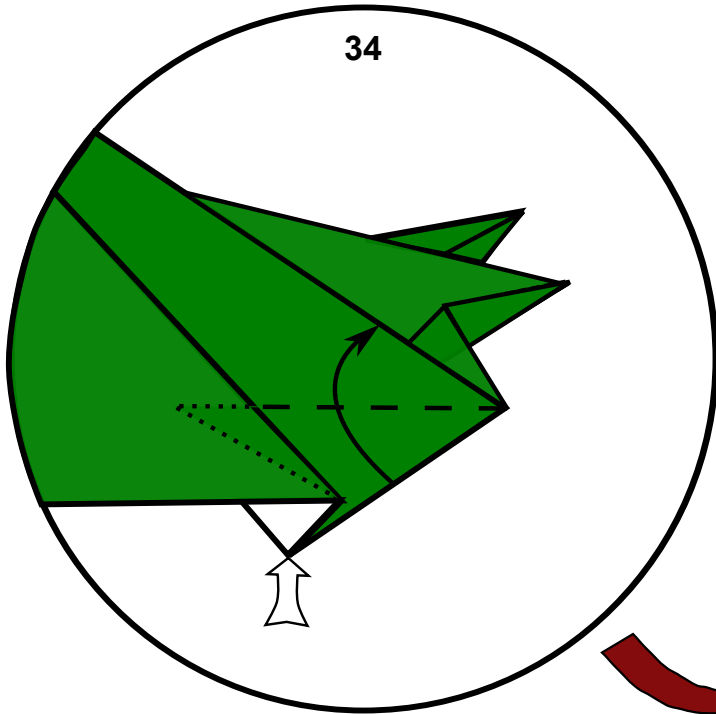
32. Reverse-fold the next edge. Notice to fold edge to edge.



33. Reverse-fold half of the flap back.

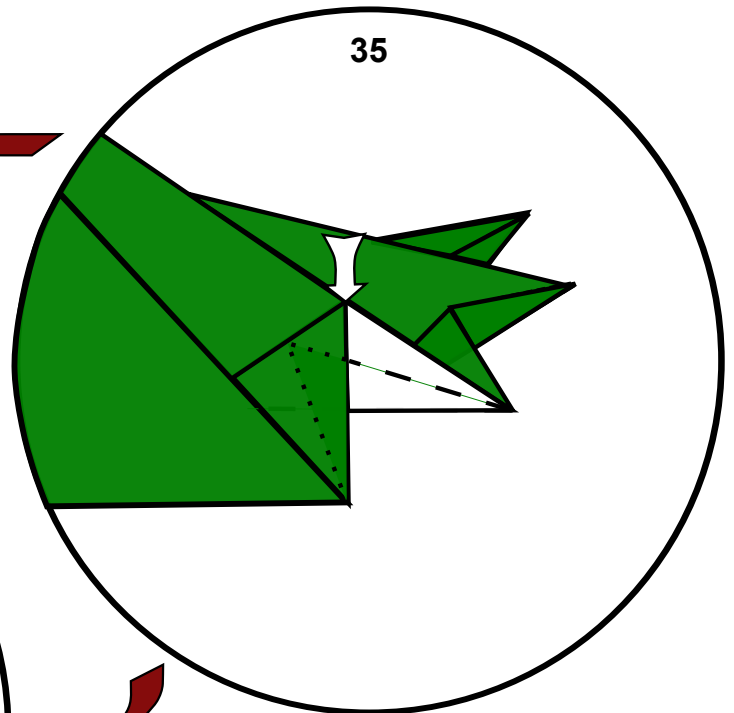


34



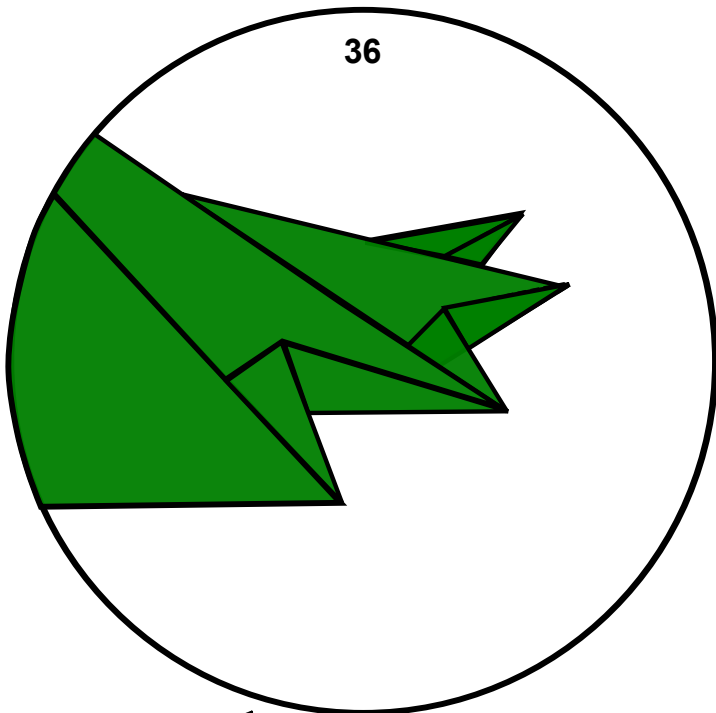
34. Reverse-fold the third edge.

35



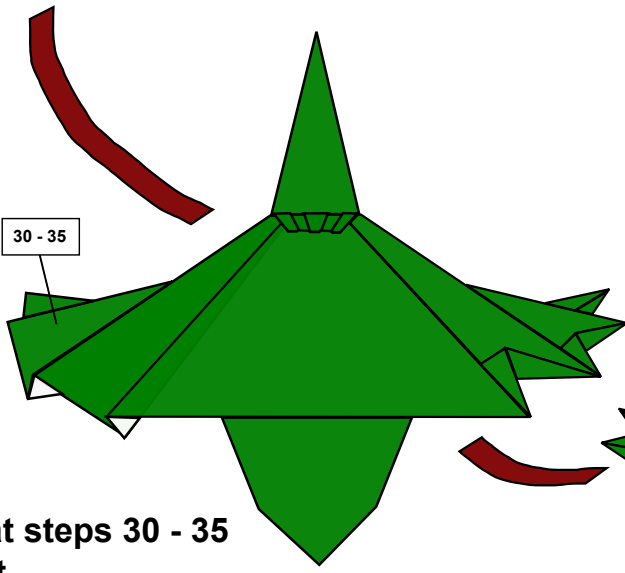
35. Reverse-fold the half of the edge back again.

36



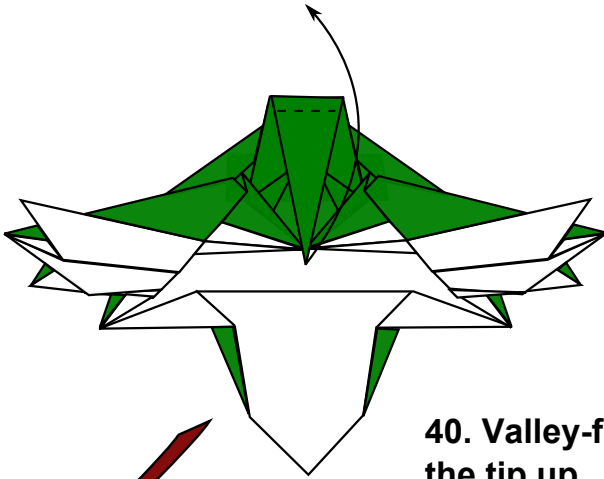
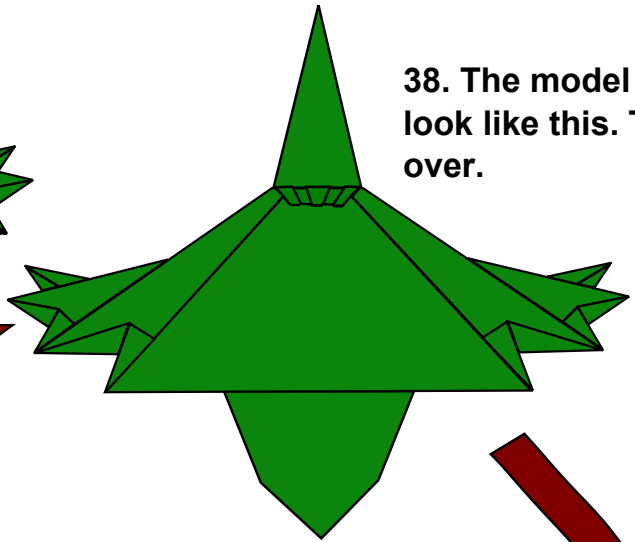
36. The wing should look like this.
Next step will be zoomed out.

30 - 35

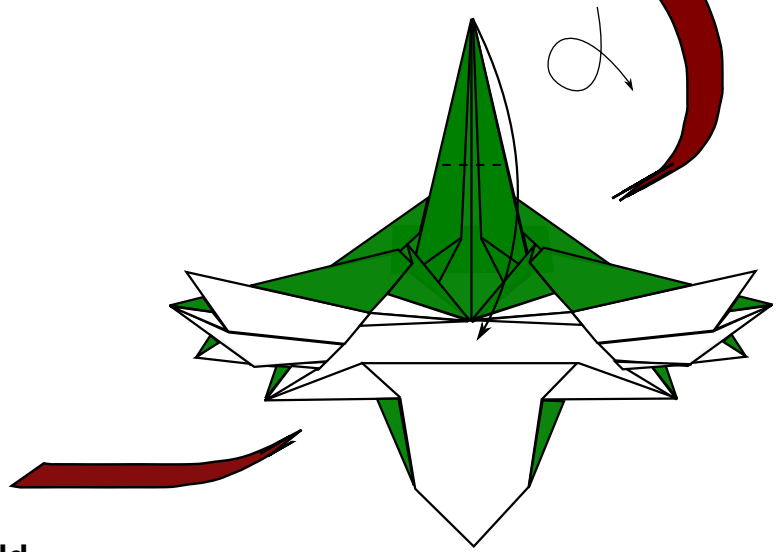


37. Repeat steps 30 - 35 on the left

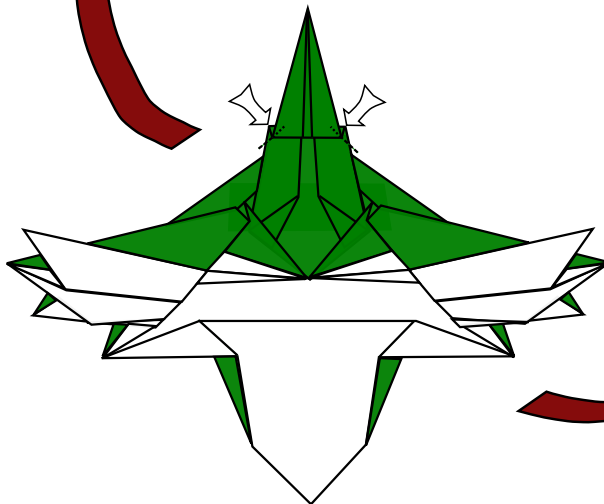
38. The model should look like this. Turn it over.



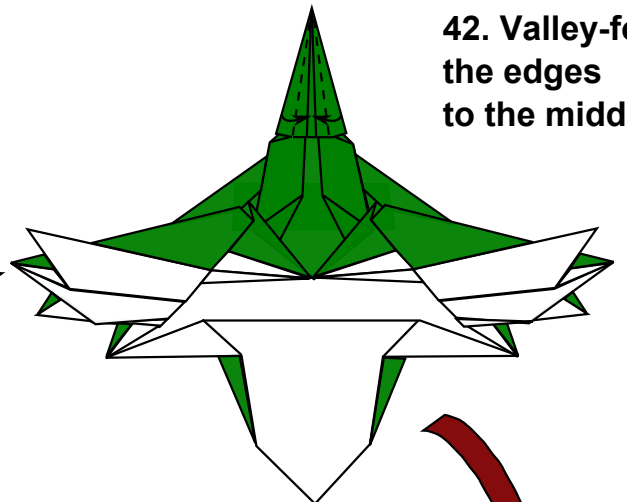
40. Valley-fold the tip up.



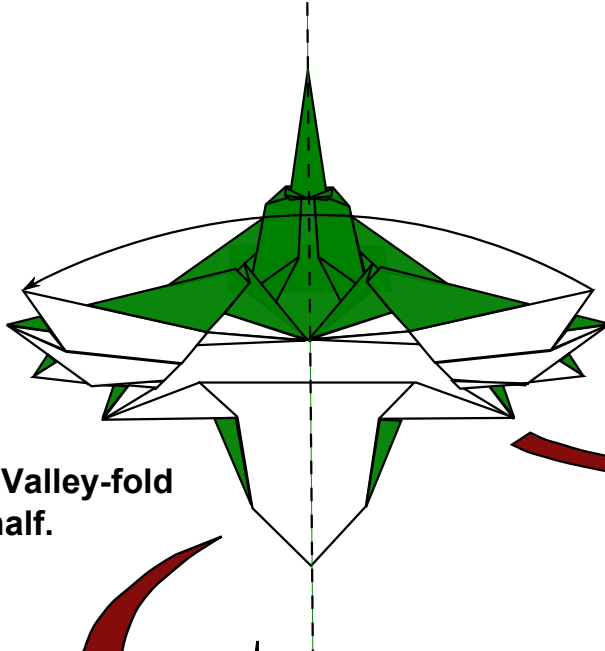
39. Valley-fold the tip down.



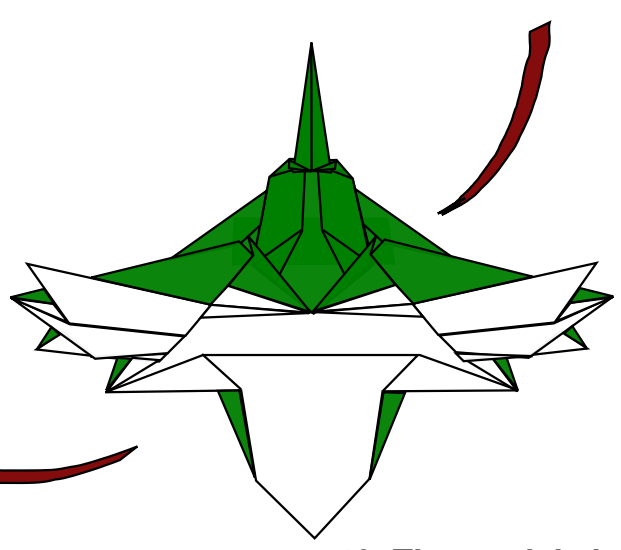
41. Reverse-fold the edges.



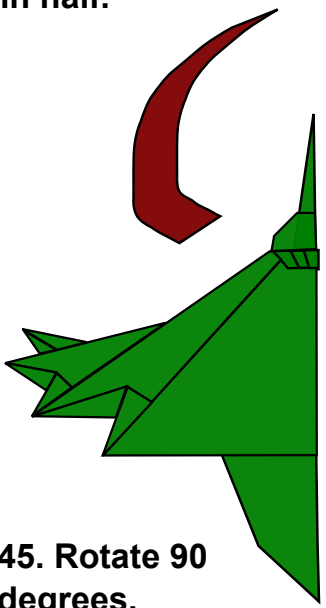
42. Valley-fold the edges to the middle.



44. Valley-fold in half.

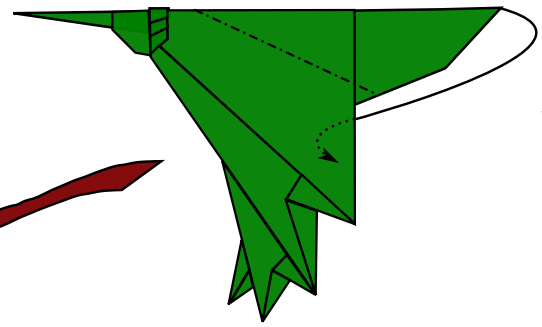


43. The model should look like this.

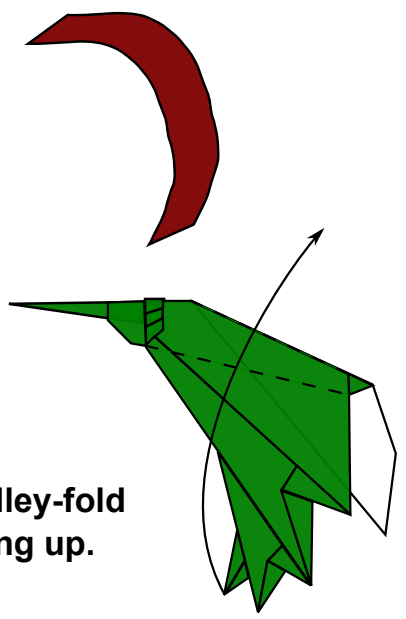


45. Rotate 90 degrees.

45°

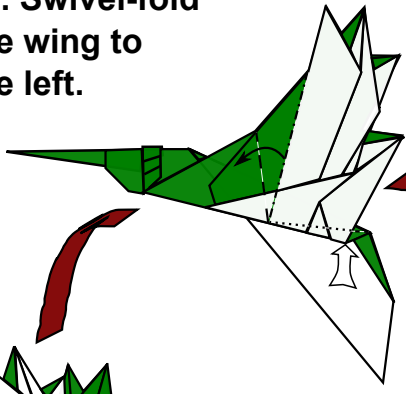


46. Reverse-fold.

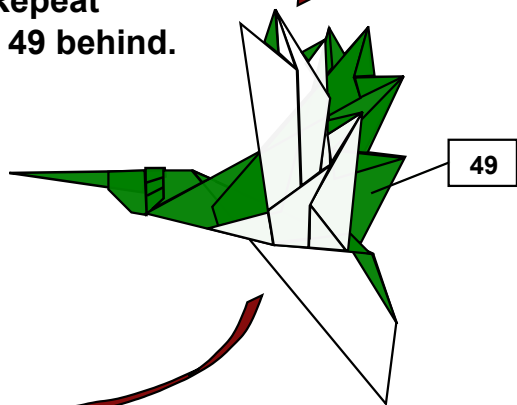


47. Valley-fold the wing up.

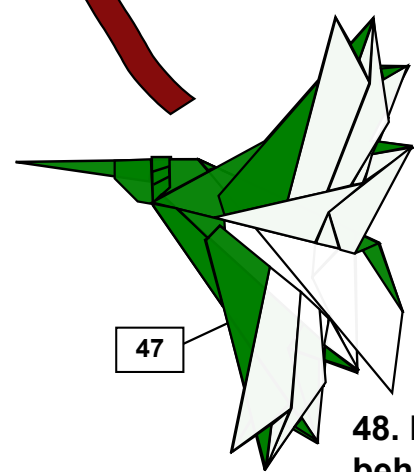
49. Swivel-fold the wing to the left.



50. Repeat step 49 behind.

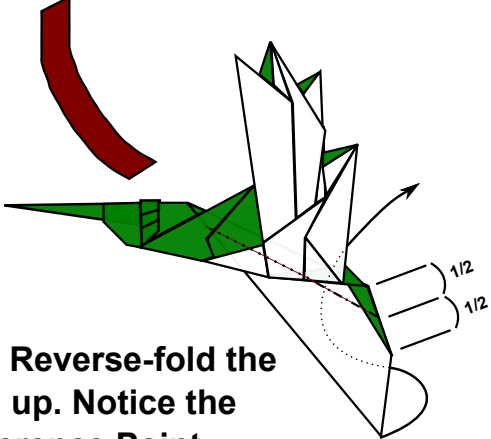


49

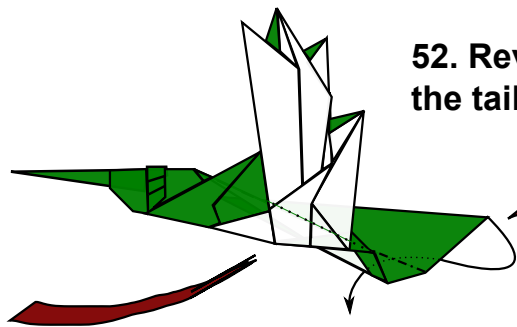


47

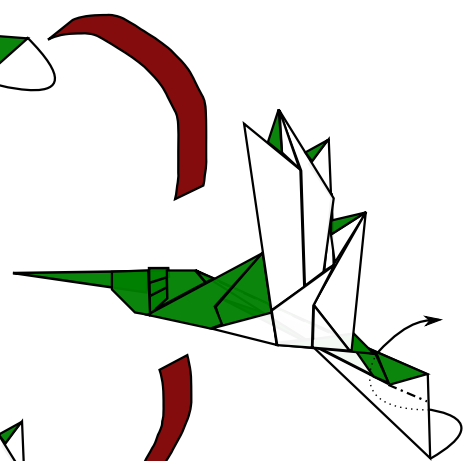
48. Repeat step 47 behind.



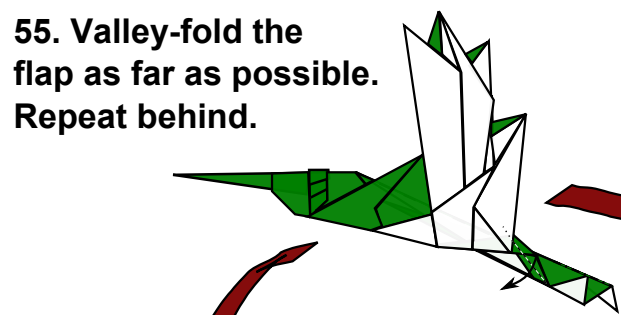
51. Reverse-fold the tail up. Notice the reference Point.



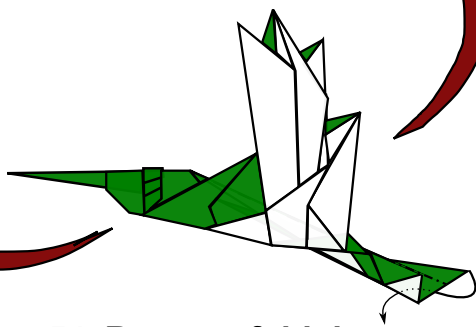
52. Reverse-fold the tail down.



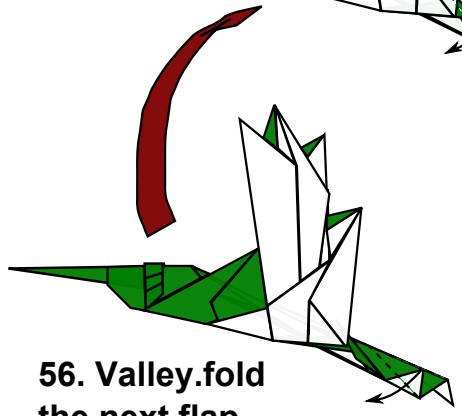
53. Reverse-fold the tail up again.



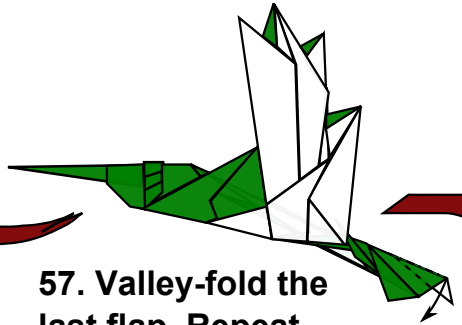
55. Valley-fold the flap as far as possible. Repeat behind.



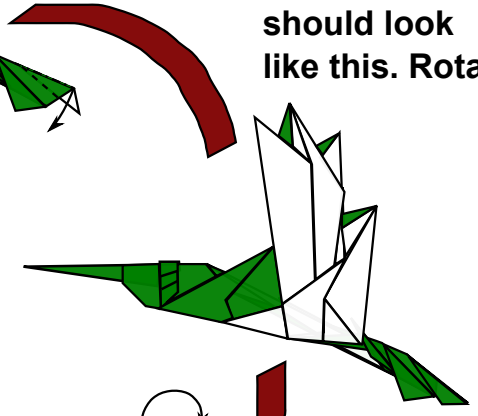
54. Reverse-fold the tail back a last time.



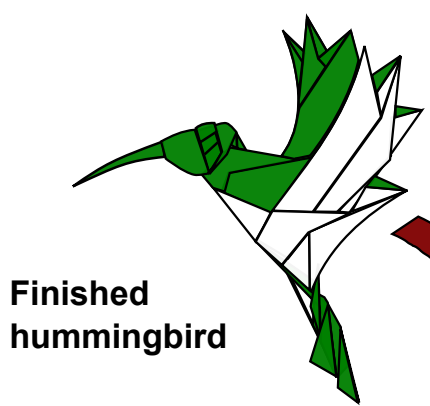
56. Valley-fold the next flap. Repeat behind.



57. Valley-fold the last flap. Repeat behind.



58. The model should look like this. Rotate.



59. Crimp-fold.



60. Shape the wings, and the head.

Finished hummingbird

