

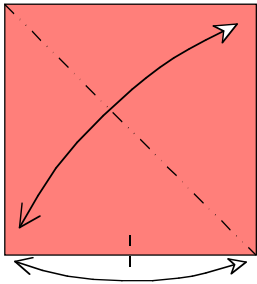


Sockeye Salmon

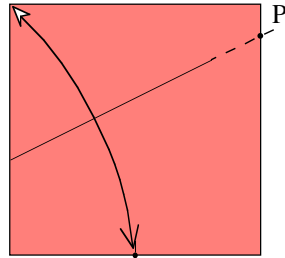
Designed by Bernard Peyton 1999

Copyright ©2005, All Rights Reserved.

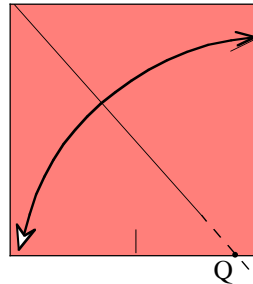
Start with paper that is red on one side and green on the other. A 9.75 inch square makes a 6 inch long salmon. My inspiration for designing this model comes from Issei Yoshino's salmon he published in "Super Complex Origami" circa 1996. I wanted the color reversal in the head and less folds in the body for my model.



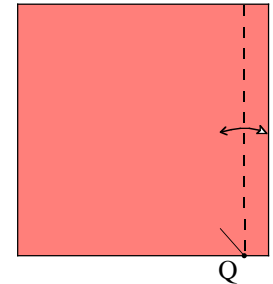
1. Crease the diagonal and the midpoint of the bottom edge.



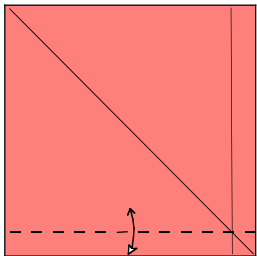
2. Place the top left corner on this midpoint and crease the right edge at point P.



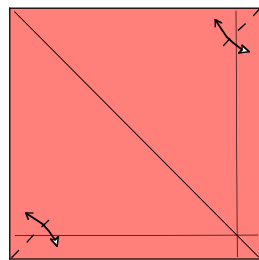
3. Place the bottom left corner on point P and crease the bottom edge at point Q.



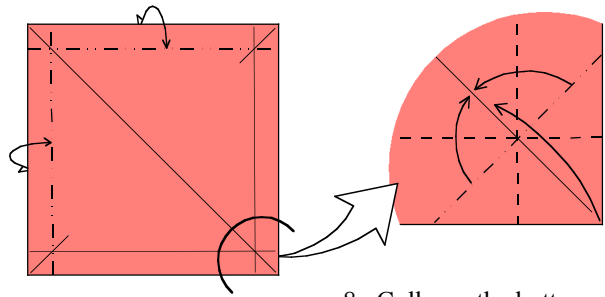
4. Valley-fold and unfold the right edge through point Q.



5. Similarly crease the bottom edge through the intersection of the last crease and the diagonal.

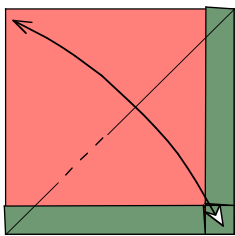


6. Bisect the corners with valley creases.

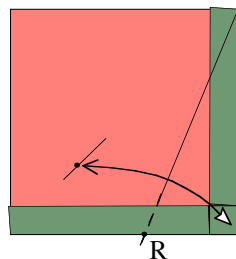


7. Mountain-fold and unfold as shown above.

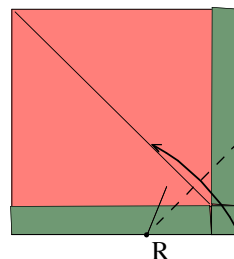
8. Collapse the bottom right corner (Preliminary Fold) by folding in two sides.



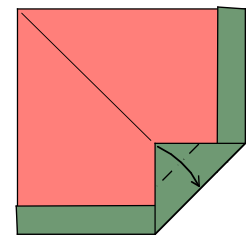
9. Crease part of the upward diagonal as shown above.



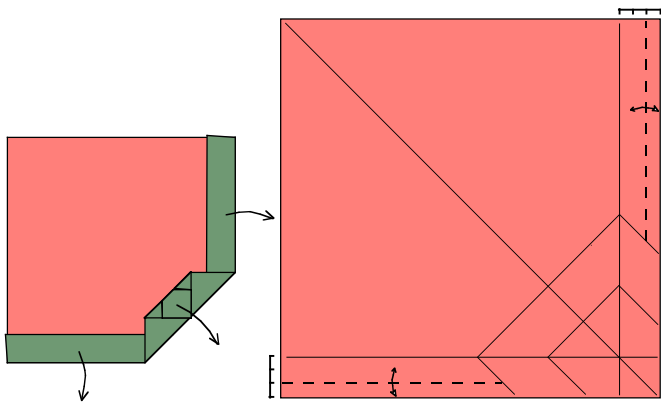
10. Place the right edge on this last crease and pinch the bottom edge at point R.



11. Valley-fold the bottom right corner to the diagonal and through point R.

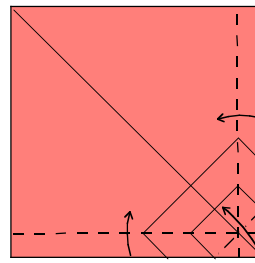


12. Valley-fold the corner back to the edge of the last fold.

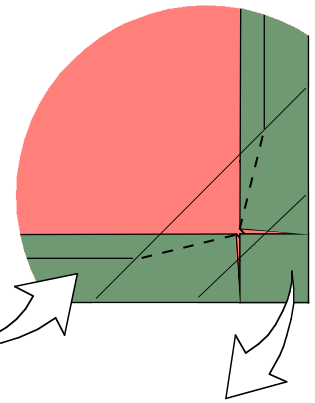


13. Unfold the model completely.

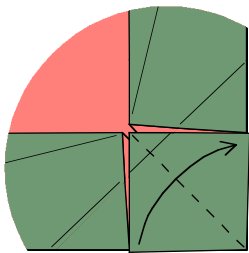
14. Valley-crease 1/3 the distance from two raw edges to the creases of steps 4 and 5 as shown above.



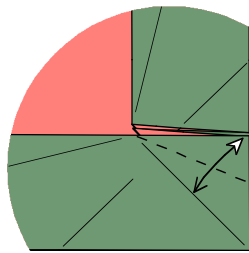
15. Refold the model as it appears in step 9.



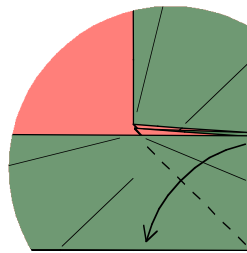
16. Make valley creases as shown above.



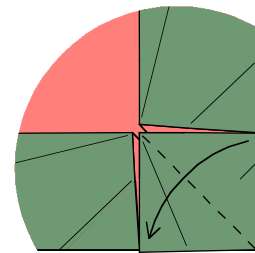
17. Fold a flap up. We are starting to make the eyes.



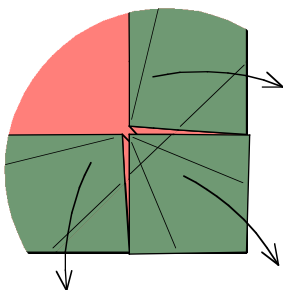
18. Bisect angle with a valley crease.



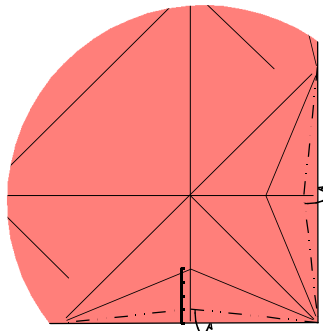
19. Fold the flap back down.



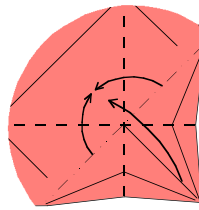
20. Repeat steps 17-19 on the other flap.



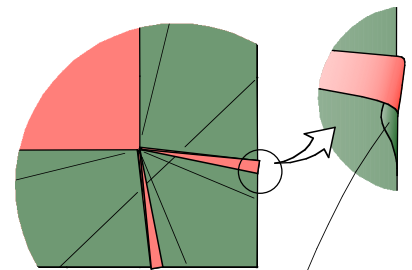
21. Unfold the model completely. NOT AGAIN!!



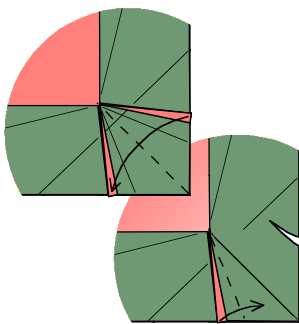
22. Mountain-fold the corner edges behind as shown. The corner will not lie flat.



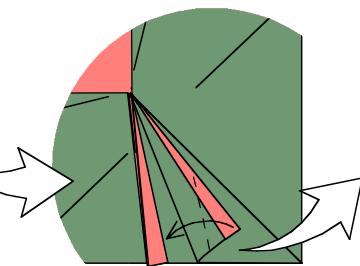
23. Redo the Preliminary Fold taking care not to rip corner edges where they were folded over (see the next diagram).



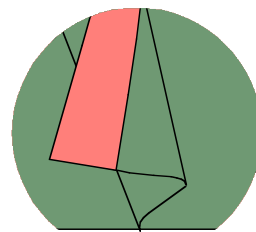
Fold the double edge over to take up the strain.



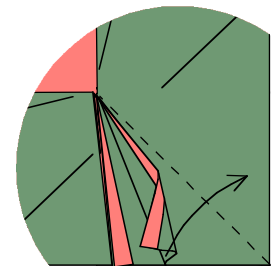
24. Fold the flap down and then up on existing creases.



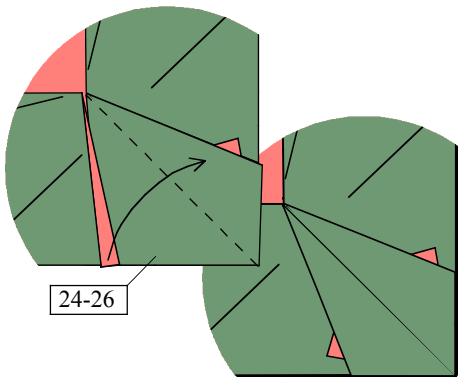
25. Valley-fold the flap tip over the last fold's edge.



Notice how the color-changed part of the flap lies on the last fold of step 24.

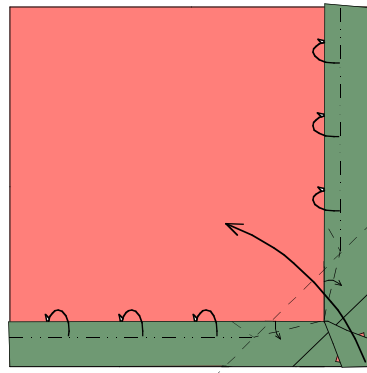


26. Fold the flap back up to the right.

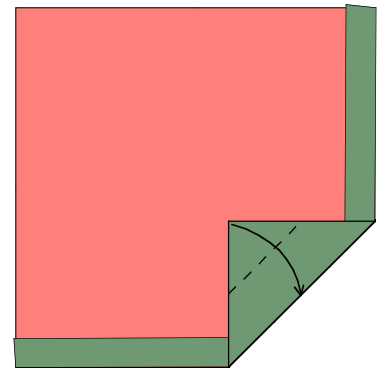


27. Repeat steps 24-26 on the other head flap.

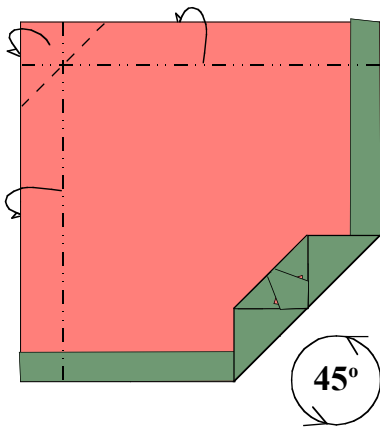
Finished head with eyes.



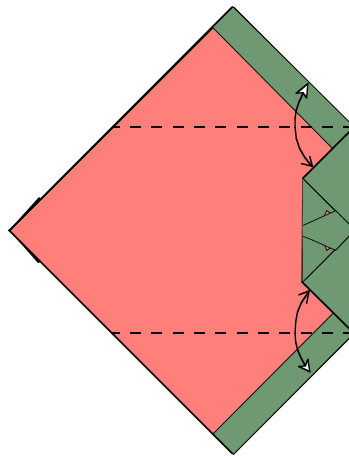
28. Refold step 11 and at the same time mountain-fold the edges underneath on the creases of step 14. The creases of step 16 allows the model to lie flat after this step.



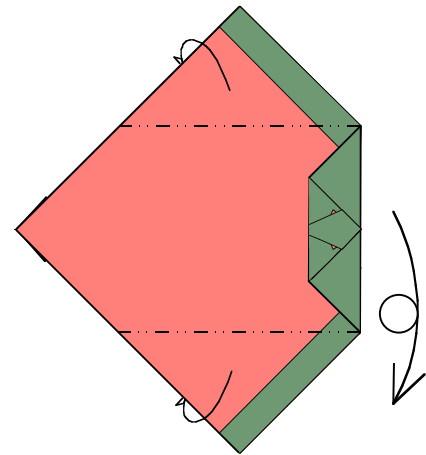
29. Fold the corner down on an existing crease.



30. Mountain-fold the top and right edges behind while incorporating a Preliminary Fold in the top left corner. Rotate the model 45 degrees counterclockwise.

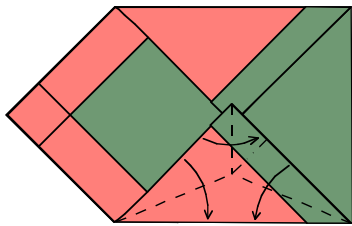


31. Valley-crease as shown above by lining up edges. The top and bottom corners will become pelvic fins.

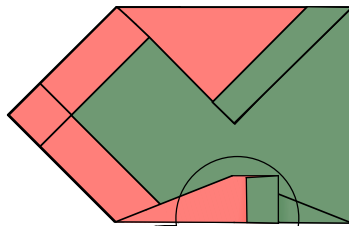


32. Reverse the previous folds. Mountain-fold first the bottom corner then the top corner.

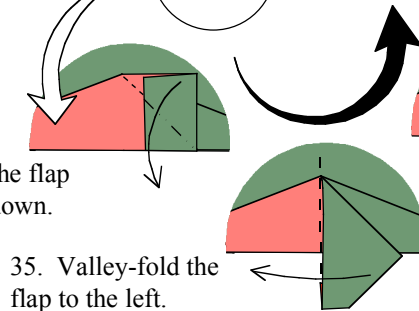
Turn the model over.



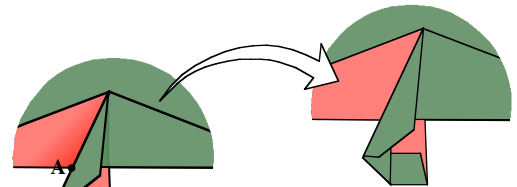
33. Rabbit ear the bottom corner through all layers to make a pelvic fin flap.



34. Open the flap and fold it down.

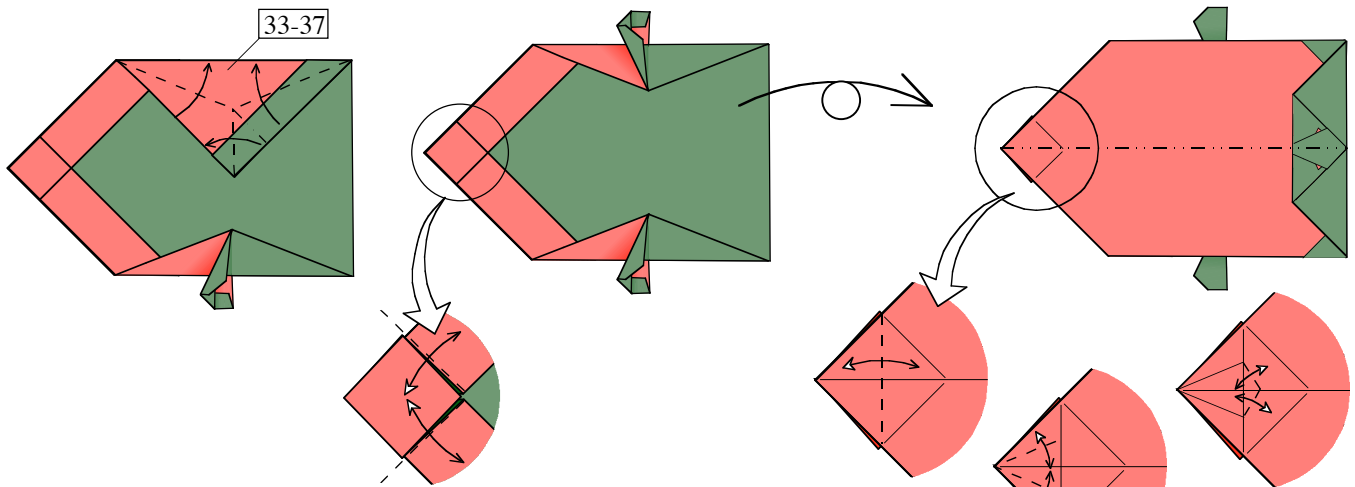


35. Valley-fold the flap to the left.



36. Fold the left tip of the flap down, then narrow the flap so that the distance AB is the same as BC (see above).

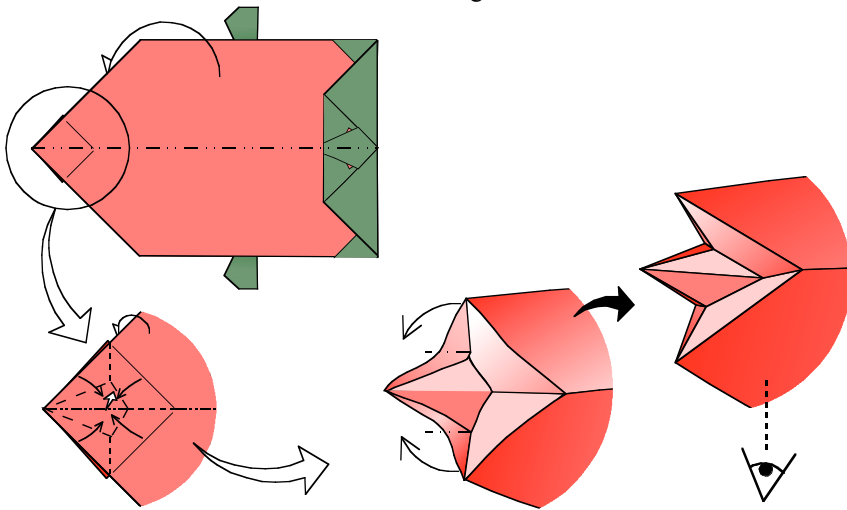
37. Mountain-fold the raw edge under.



38. Repeat steps 33-37 on the top corner.

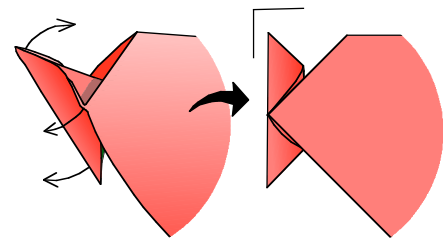
39. Valley-crease the tail through all layers using the paper edges as a guide. Turn the model over.

40. Valley-crease the top layer as shown above to create a kite shape. Creases on the right side of the kite are not parallel to those of the last step. Estimate these now and adjust them in the next step.

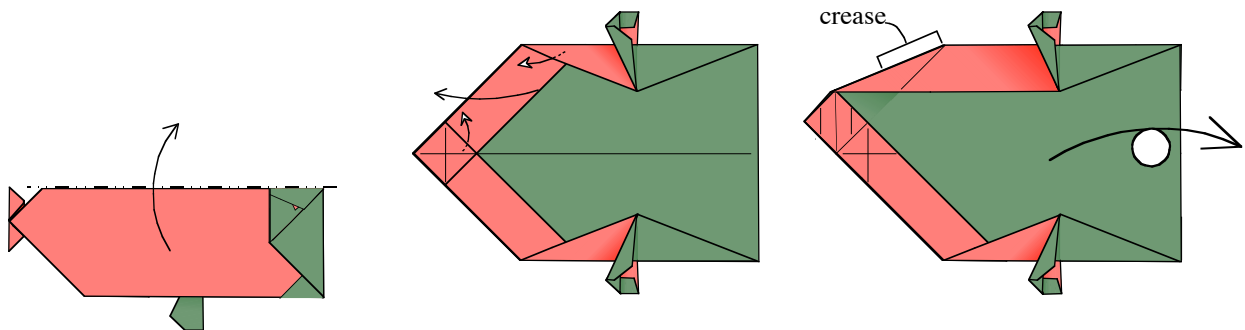


41. Mountain-fold the model in half while incorporating the tail folds seen above.

42. Fold the sides of the collapsed square back. View from the side is next.



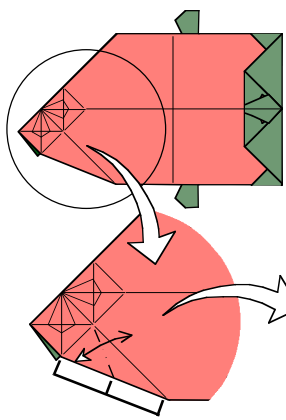
43. Swing the bottom of the tail away from the body as you pinch the folds in the previous diagrams. Adjust the estimated folds so that the tail edge is perpendicular to the salmon's top edge.



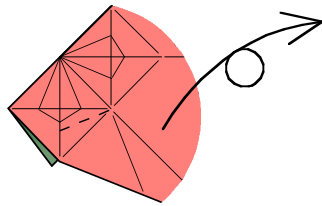
44. Undo the tail folds and return the model to the start of step 39.

45. Pull out trapped paper to create an anal fin.

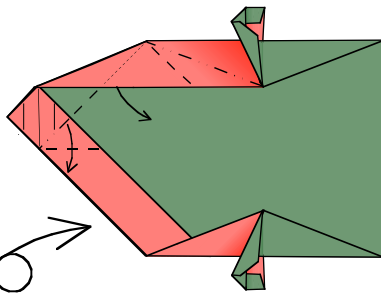
46. Crease along the top edge. That part of the model will not lie flat. Turn the model over.



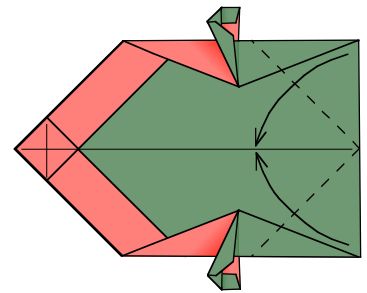
45. Mountain-crease through both layers.



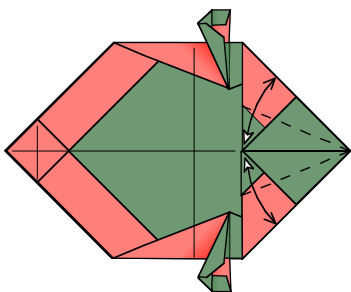
46. Bisect an angle with a valley crease and turn the model over.



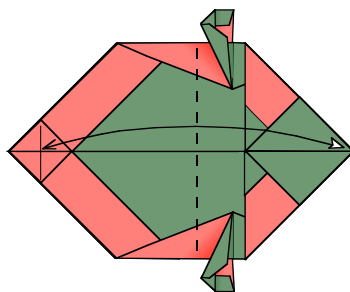
47. Refold the model to the start of step 39.



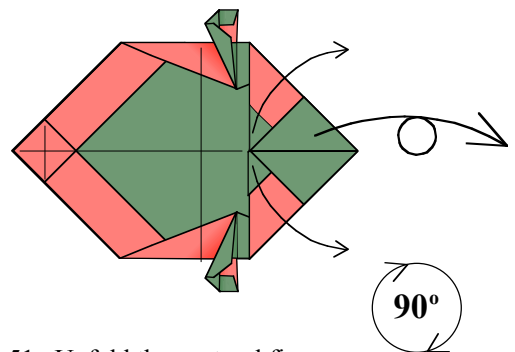
48. Valley fold the corners to the midline.



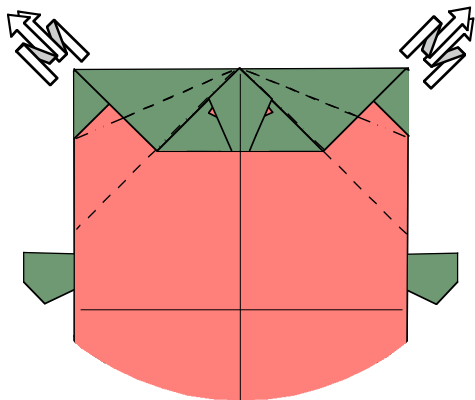
49. Bisect angles with valley creases.



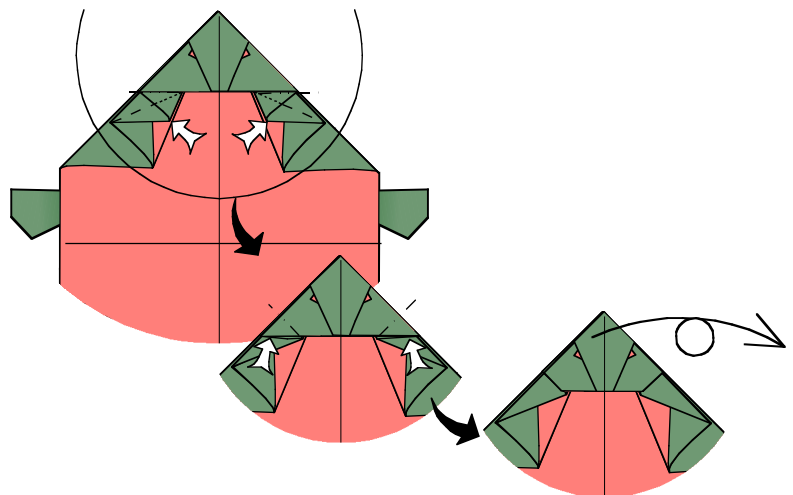
50. Place the right point to the center of the tail crease, and unfold. This defines where the tip of the dorsal fin will be.



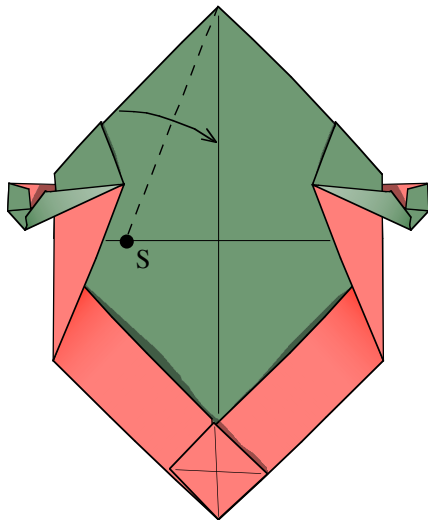
51. Unfold the pectoral fin flaps. Turn the model over and rotate it 90 degrees.



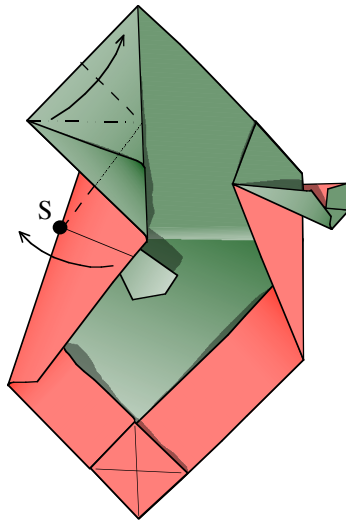
52. Crimp pectoral fin flaps symmetrically by holding layers together on the corners, and shoving them between head and body layers. Parts of folds 48-49 will be reversed.



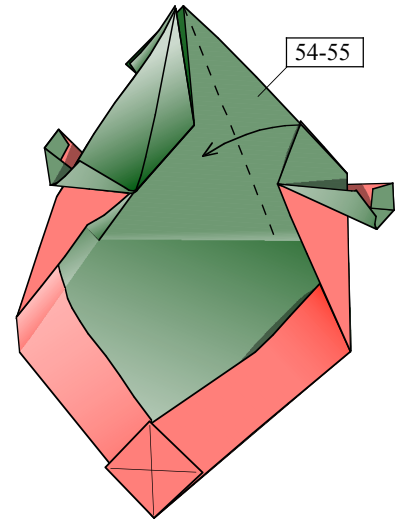
53. Inside reverse-fold two pairs of flaps and turn the model over.



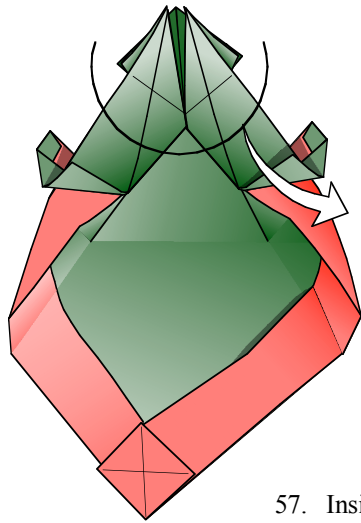
54. Valley-fold the left side to the midline. Crease sharply to point S on the crease of step 50.



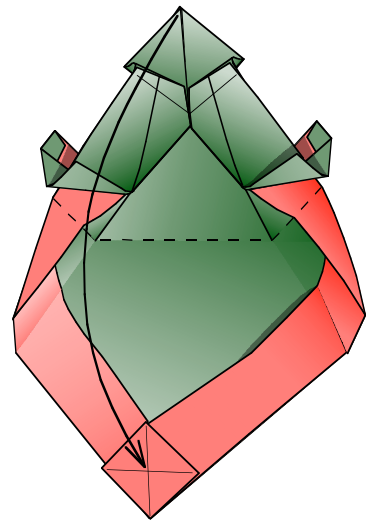
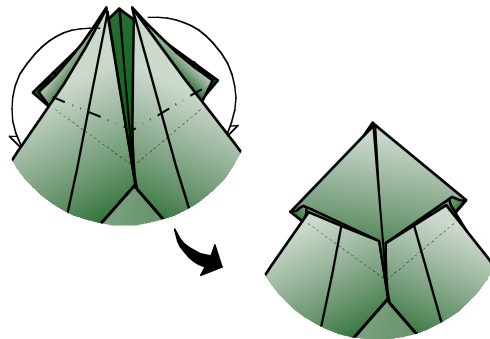
55. Swivel fold flap. The model will not lie flat.



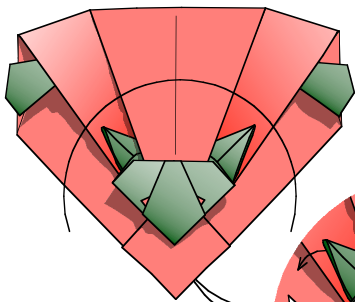
56. Repeat steps 54-55 on the right.



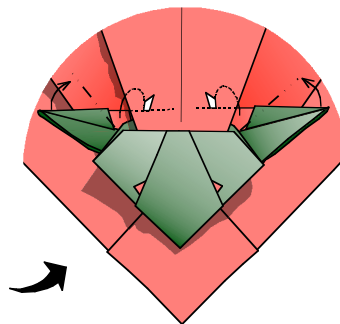
57. Inside reverse fold the pectoral fins. Note position of the fold is not perpendicular to edges.



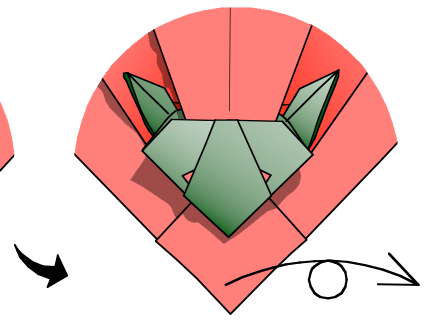
58. Fold the model in half on the crease of step 50. Ahhh. The model is flat once more.



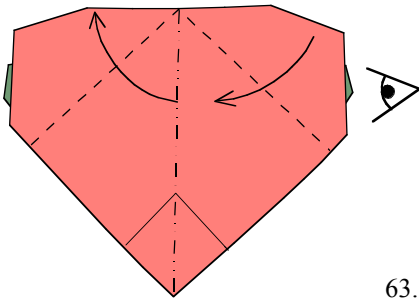
59. Rotate the fins down and away from the head



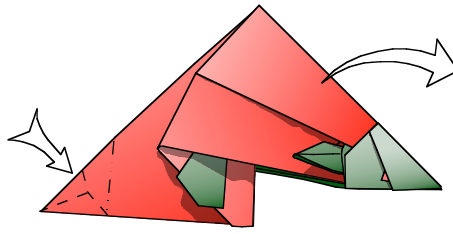
60. Fold under the indicated edges while rotating the fins back toward the midline.



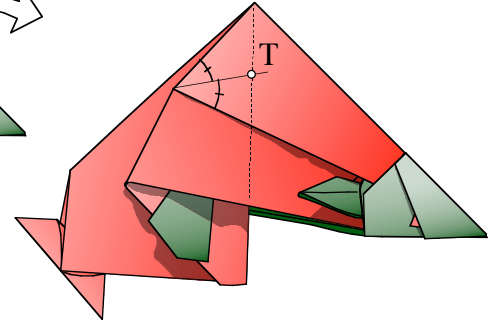
61. Turn the model over.



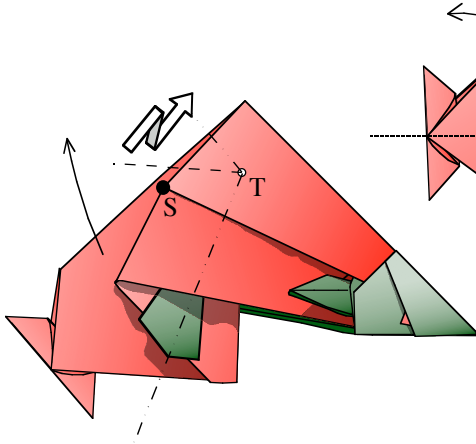
62. Collapse the model as shown above.



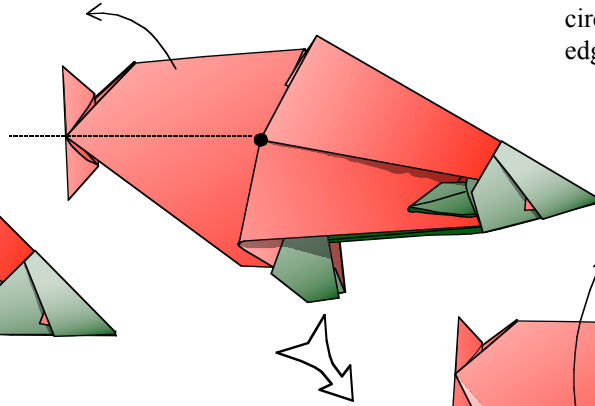
63. Refold the tail (step 41).



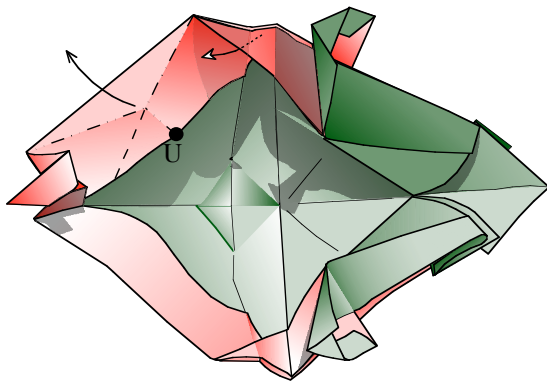
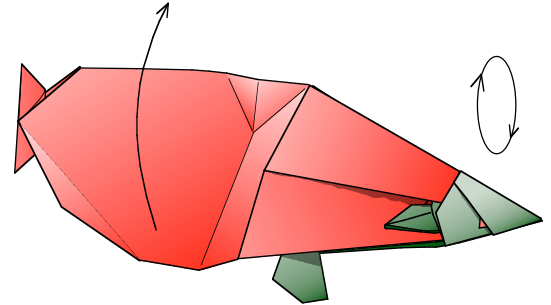
Locate point T (marked by the hollow circle) at the intersection of a hidden edge and an angle bisector.



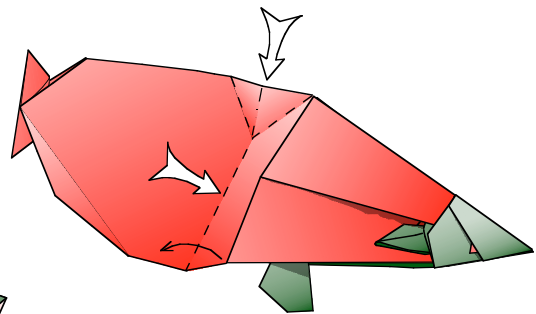
64. Crimp the back and rotate the tail up from point T so that point S lines up with the tail midpoint.



65. Unfold the last step and open up the near side of the model and turn it over on its back.

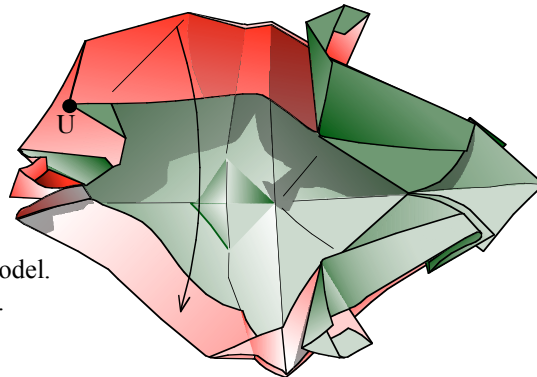


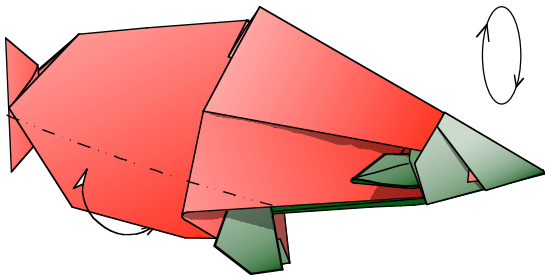
66. Pull out trapped paper and refold the anal fin (steps 43-45). Note that point U on the raw edge is close to (but not on) the crease of step 45.



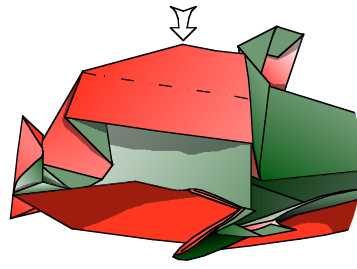
68. Refold model to the start of step 65.

67. Close the model. It will not lie flat.

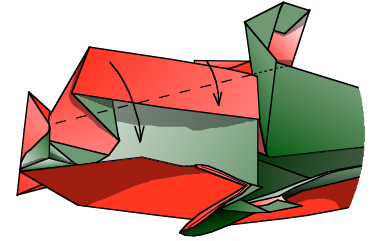




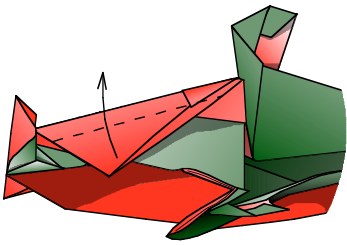
69. Fold and unfold the anal fin flap. Note that the crease starts at the front of the pelvic fin and ends just below the tail midpoint. Rotate the model.



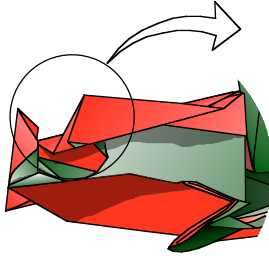
70. Open sink the anal fin flap as shown above. Do not worry if some sinked paper is visible below the raw edge.



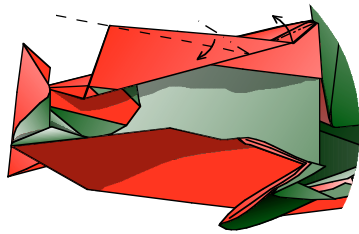
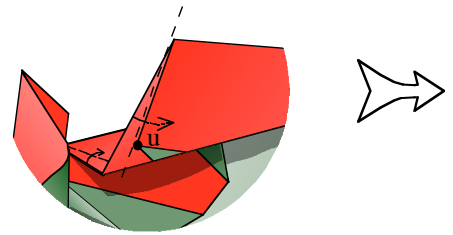
71. Valley-fold the anal fin down on the crease of step 69.



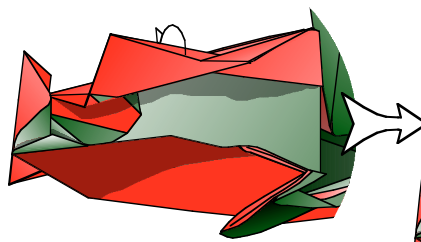
72. Fold the anal fin back up on a crease parallel to the edge.



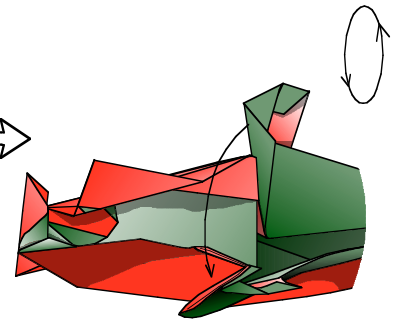
73. Swivel fold the left edge of the anal fin and tuck this paper under the layer at point U. You may want to adjust the valley fold of step 66 to line up fin edges.



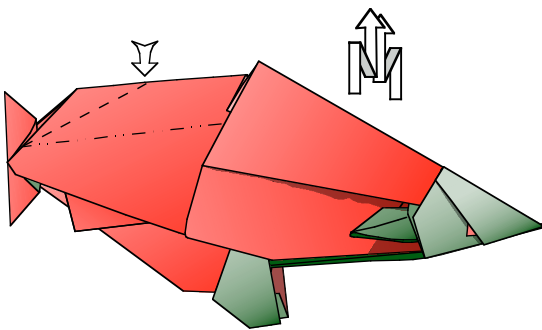
74. Swivel fold the right anal fin edge.



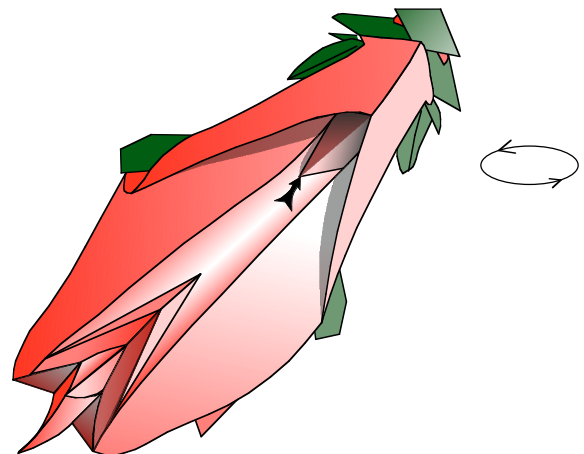
75. Tuck the folded over edge between the layers underneath it.

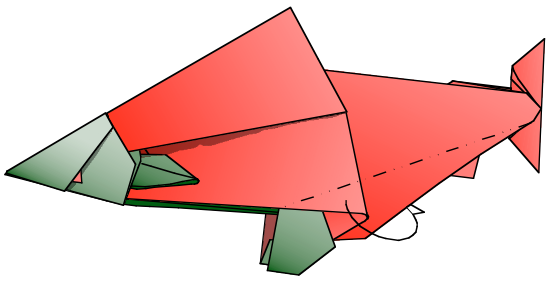


76. Fold the model in half and rotate it.

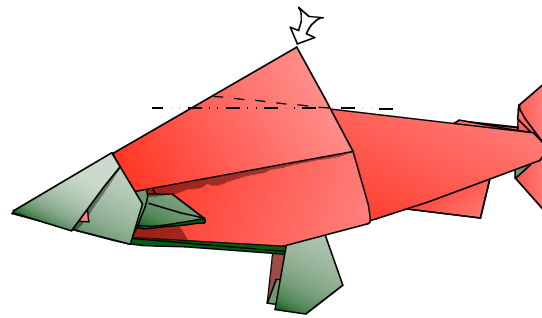


77. Crimp the back symmetrically. The initial crimp in the back that allowed the tail to rotate upward (step 64) is extended (next view). Push its bottom edge toward the head to take up slack paper (dark arrow).

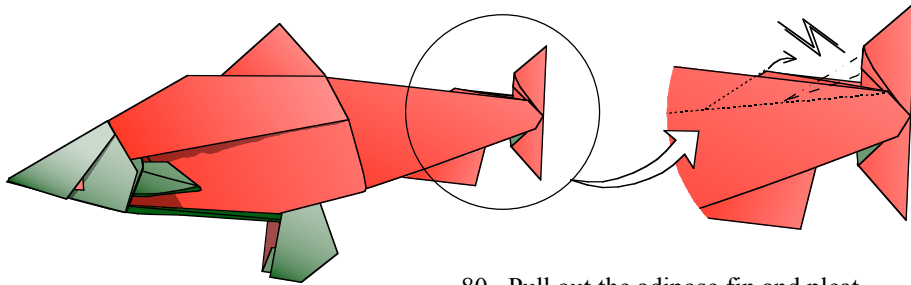




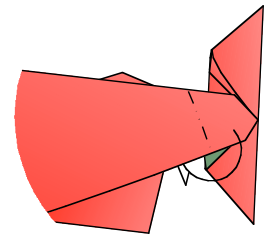
78. Fold the belly under on a crease in line with that of step 69 on the other side.



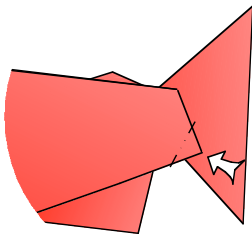
79. Crimp the dorsal fin symmetrically.



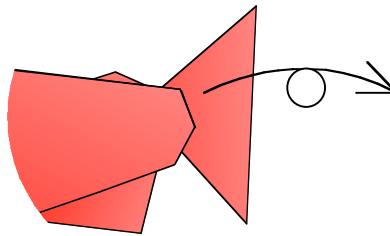
80. Pull out the adipose fin and pleat its layers next to the tail to isolate it.



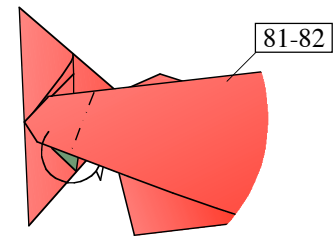
81. Inside reverse-fold the indicated flap.



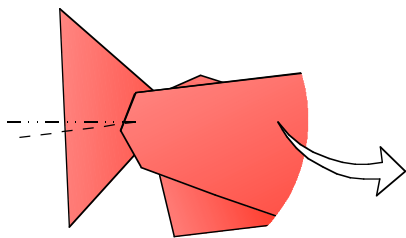
82. Inside reverse-fold the corner.



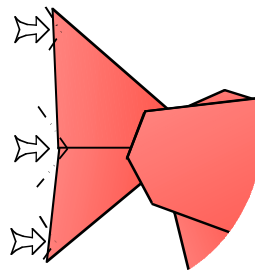
83. Turn the model over.



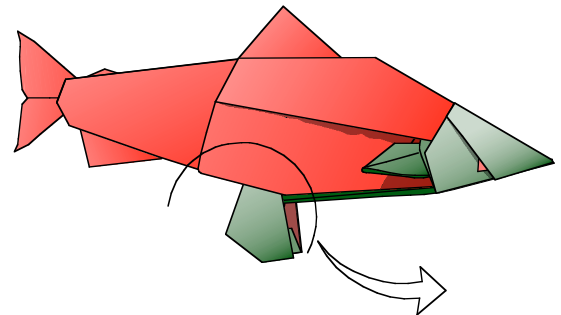
84. Repeat steps 81-82 on this side.



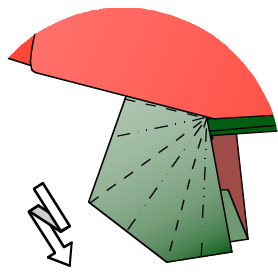
85. Crimp the tail symmetrically.



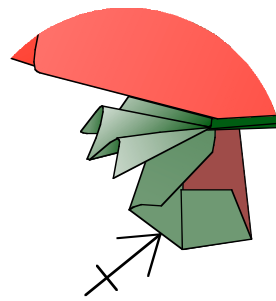
86. Inside reverse-fold the tail center and bend the tips toward the center.



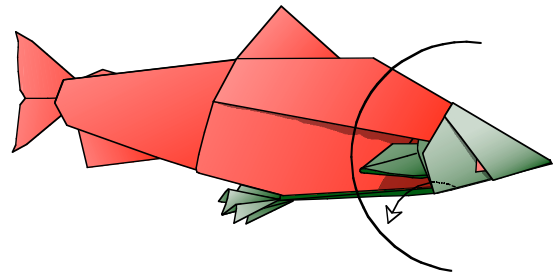
Next view is an enlarged pelvic fin.



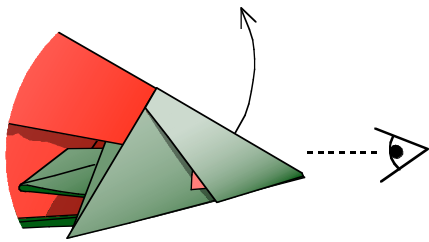
87. Crimp the pectoral fin.



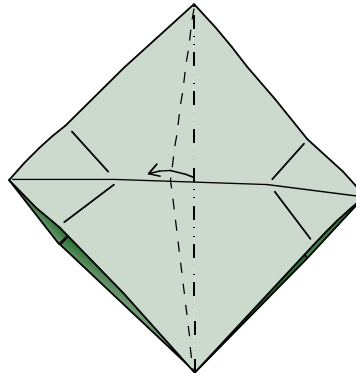
88. Repeat the last step on the other fin.



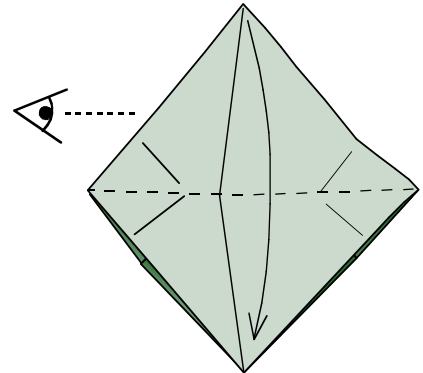
89. Pull out flaps on both sides of the head. This location is called a gill cover.



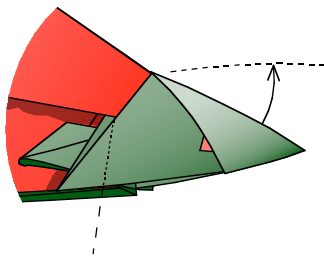
90. Lift up the head flap. The next view is the open flap viewed from the front. For female salmon do not do steps 91 and 92.



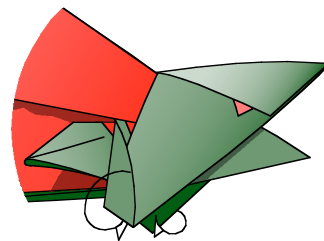
91. Crimp the midline on top of the left side of the open flap as shown. Crimp through all layers.



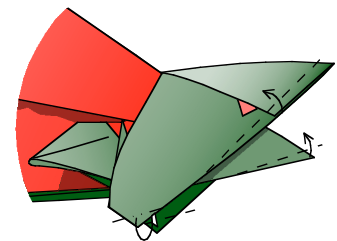
92. Fold the head flap back down.



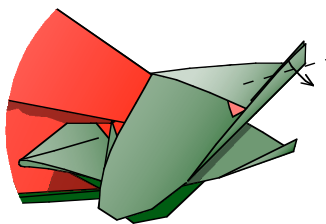
93. Raise the flap once more and pinch the flaps closed at the gill covers to hold the upper jaw open.



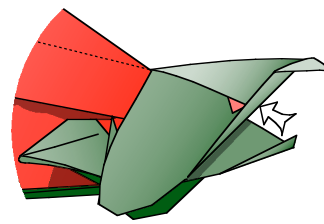
94. Wrap the indicated layer to the other side. Repeat on the other gill cover.



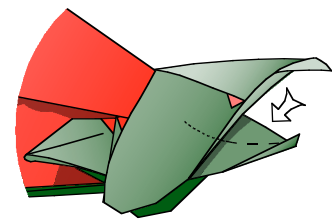
95. Outside reverse-fold edges of the lower and upper jaws. Round the gill covers with mountain folds.



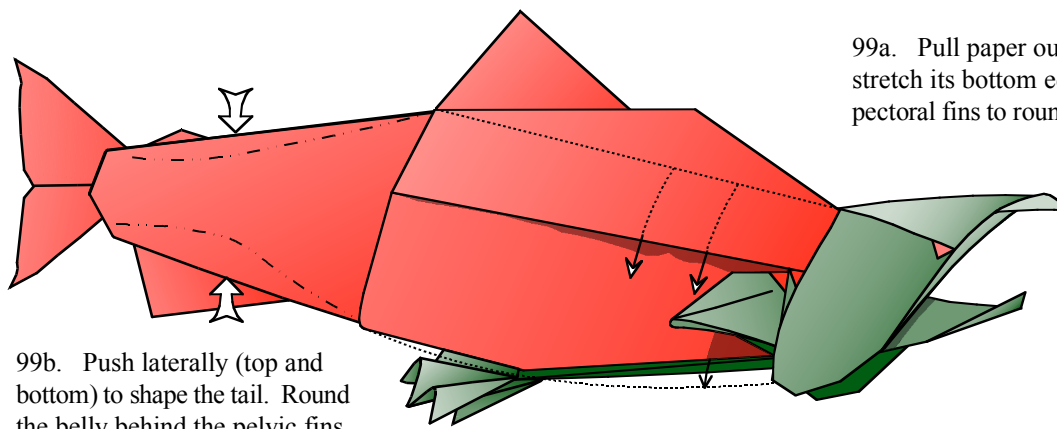
96. Fold the upper jaw tip down and shape it into a hook.



97. Curve the edges of the upper jaw on both sides of the model.

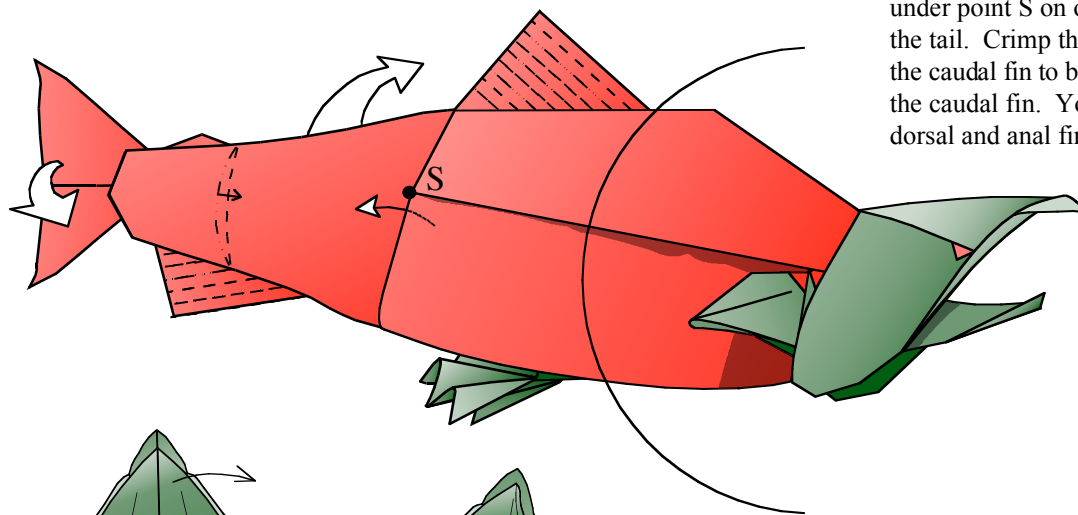


98. Depress inside the mouth to narrow the lower jaw.

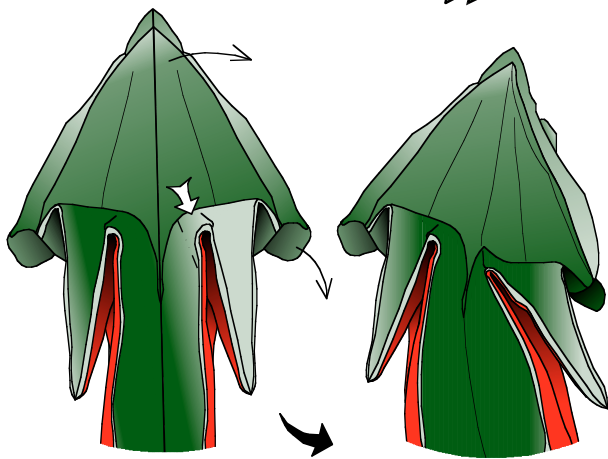


99a. Pull paper out of the back and stretch its bottom edge under the pectoral fins to round the body cavity.

99b. Push laterally (top and bottom) to shape the tail. Round the belly behind the pelvic fins.



99c. Make your salmon swim with some of the following shaping folds. Pull paper from under point S on one side of the body to bend the tail. Crimp the tail farther down toward the caudal fin to bend it the other way. Curve the caudal fin. You might want to pleat the dorsal and anal fin.



100. Ok. OK. Adjust the fold of step 57 above on the right side to turn the head. Turn the model over and crimp the back on the right side as close to the head as possible.

Use these shaping folds to create a school of spawning salmon.

