# Angry Fish

Designed and diagrammed in 2013
by Bernie Peyton

Difficulty / High Intermediate
Time to Create / 30 min.
Dimension / R=0.5 for length

Author's advice: This model has everything: color change, a locking fold, you can blow it up with air, and motion! When you are done playing with it, collapse the air out of it, place it back in your pocket, or send it to a friend. Kami makes a great model. I am grateful to Viviane Berty and Jean-Michel Lucas for correcting my diagrams.
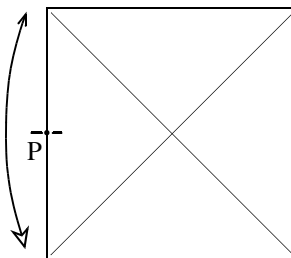
My inspiration came from the wonderful 3D models of Roman Diaz and the video game "angry bird".
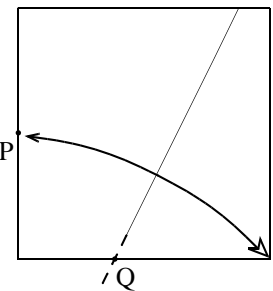Why not angry fish?
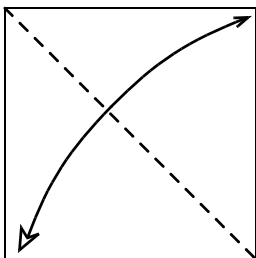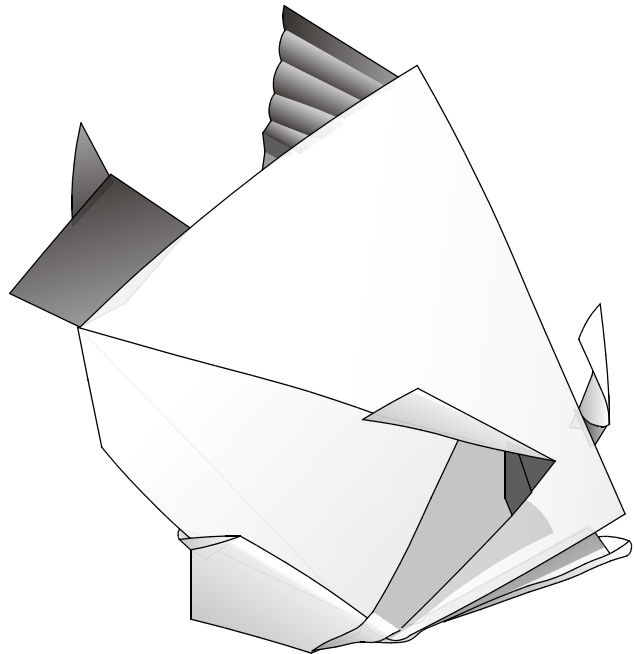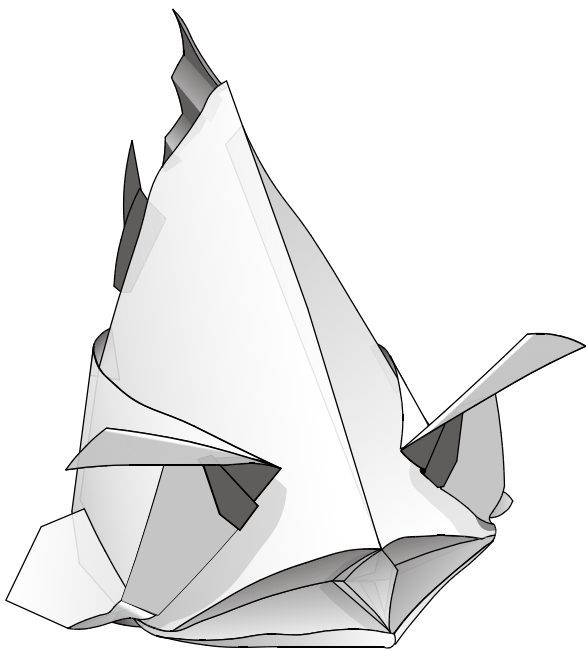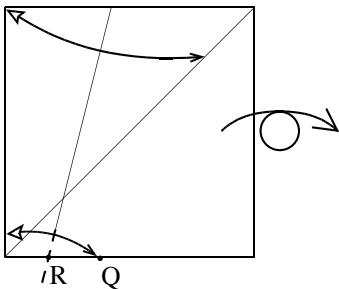
1. Valley-crease the downward diagonal.
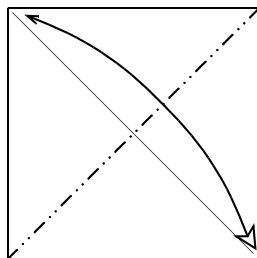
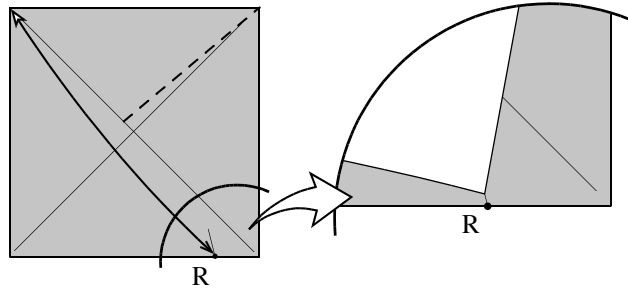2. Mountain-crease the upward diagonal.

3. Crease the midpoint of the left edge at point P.

4. Place the bottom right corner on point P and crease the bottom edge at point Q.

5. Place the top left corner on the upward diagonal and the left edge on point Q. Crease the bottom edge at point R. Turn the model over side to side.
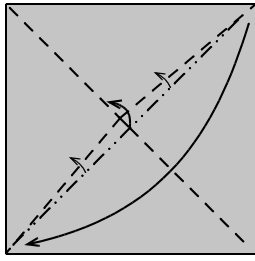
6. Place the top left corner on the crease through point R. Valley-crease from the top right corner to a diagonal.
Note: The top right corner almost touches the borrom edge to align this step.
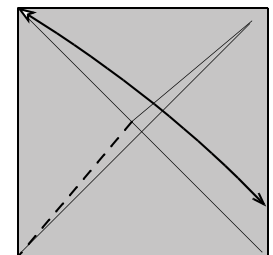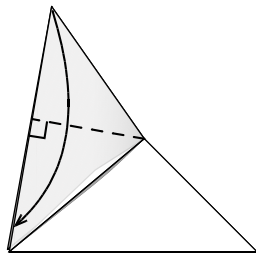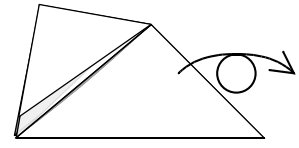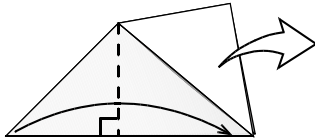
7. Valley-crease.

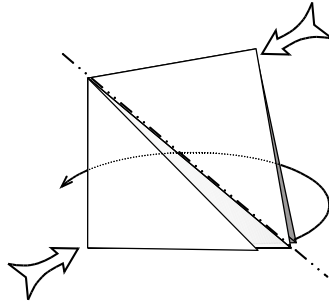8. Crimp on the folds of steps 2, 6, and 7; and fold the model in half.
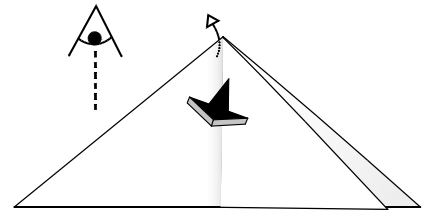
9. Valley-fold flap.
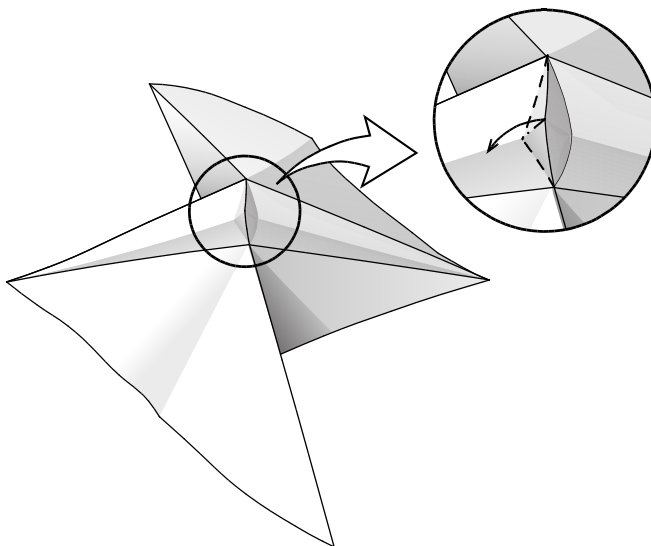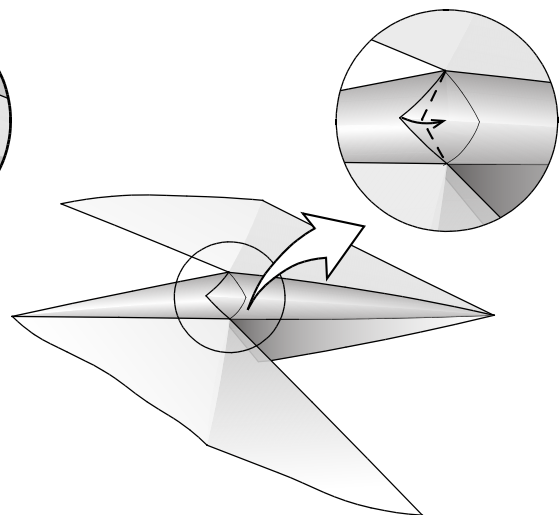
10. Turn over side to side.
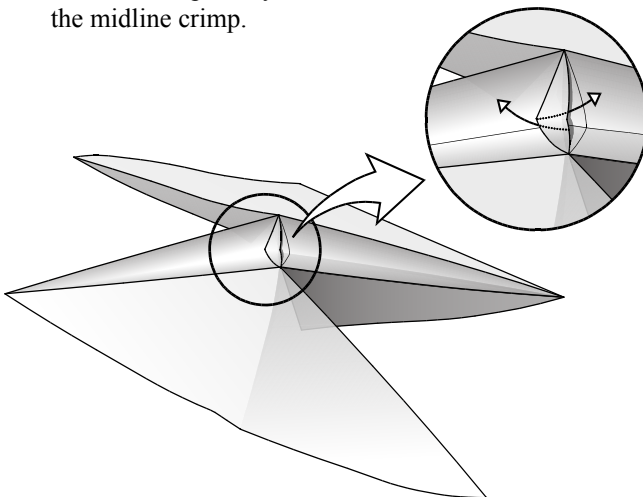
11. Valley-fold flap.

12. Squash symmetrically.

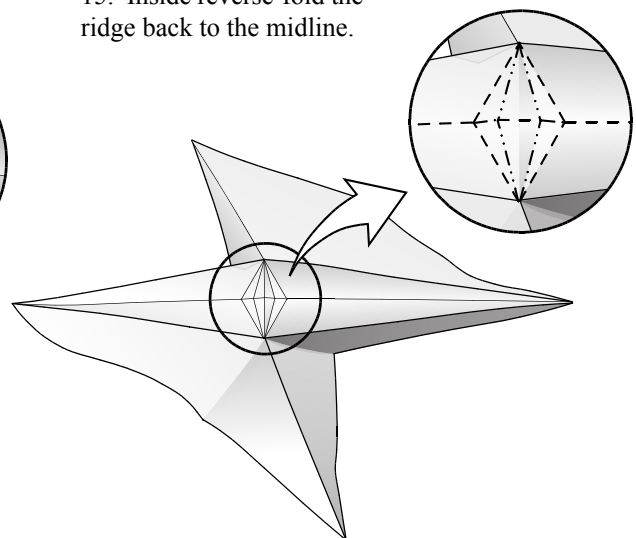13. Carefully open the midline crimp at the top. This is the mouth.

14. Valley-fold the ridge to the left and partially close the midline crimp.
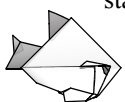
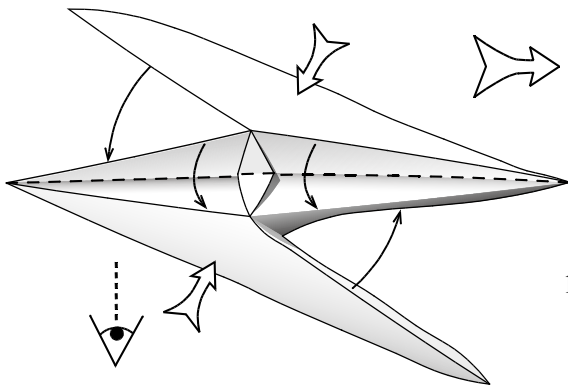15. Inside reverse-fold the ridge back to the midline.

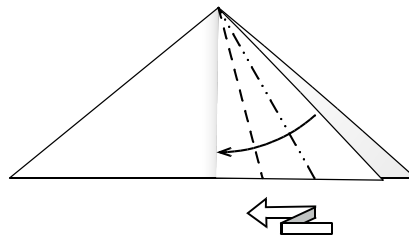16. Return the model to the start of step 14.
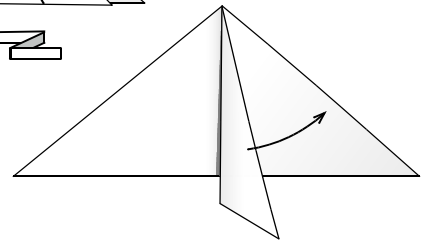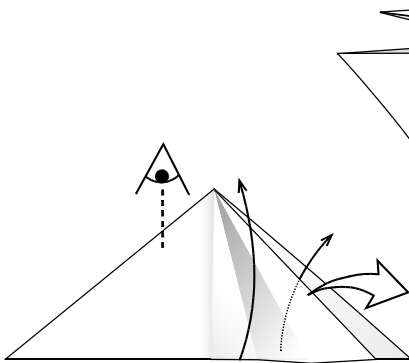
17. Crimp symmetrically and close the mouth.

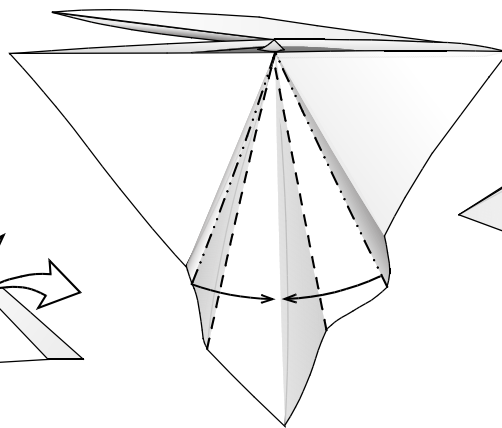18. Close the mouth crimp and flatten the model.
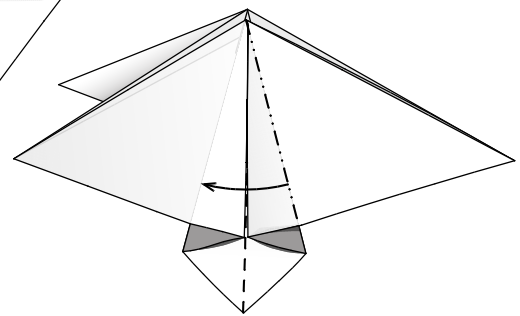
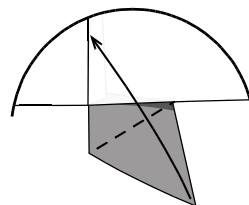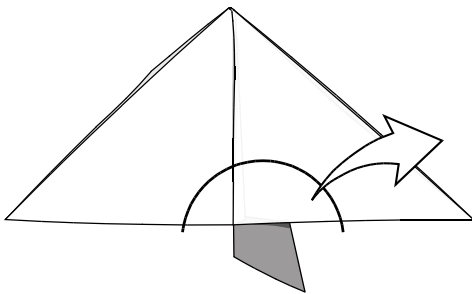19. Pleat in thirds.
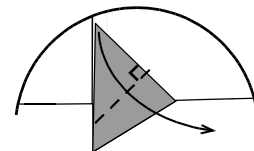
20. Undo pleats.

21. Open the model. It won't lie flat.

22. Reverse the direction of the two folds on the left and pleat the fish's tail.

23. Valley-fold the tail in half.
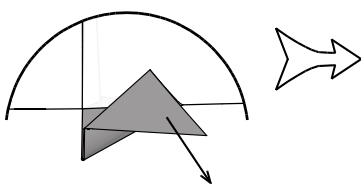
The model is now flat.

24. Valley-fold the tail flap up along hidden edges.
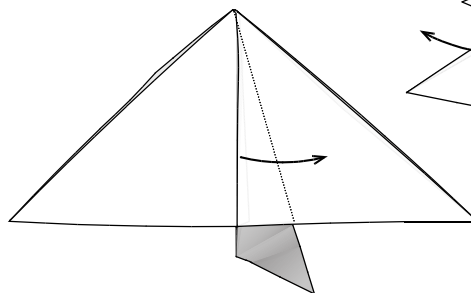
25. Valley-fold the tail down so that the two parts of the tail cross in the middle of its bottom edge.
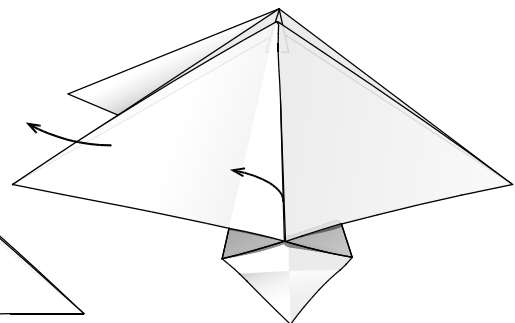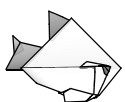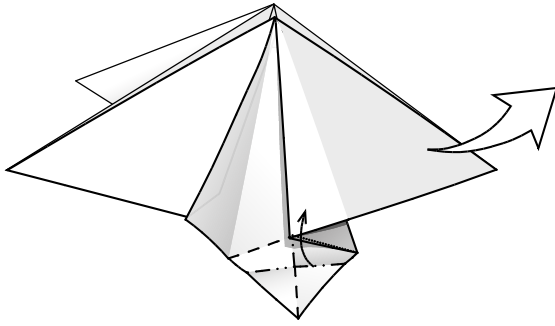
26. Undo the pleat.
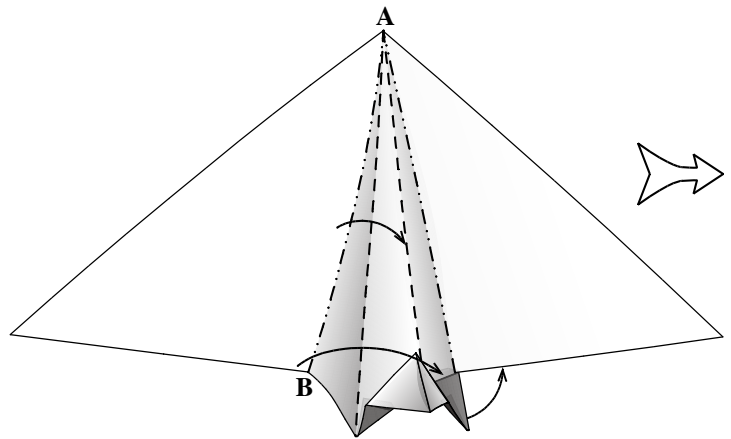
27. Open the tail to the start of step 23.

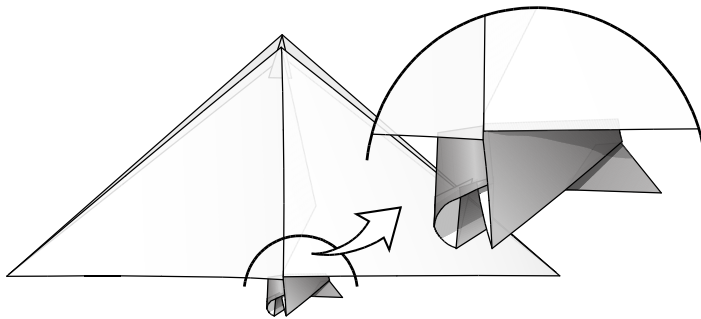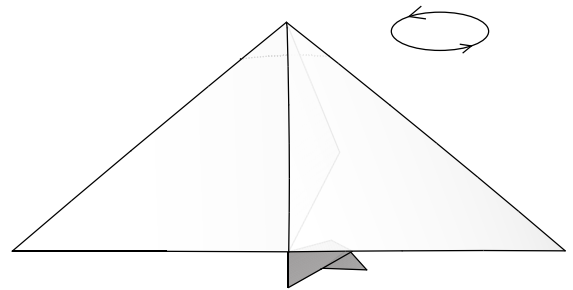28. Open the tail pleat on the left side.

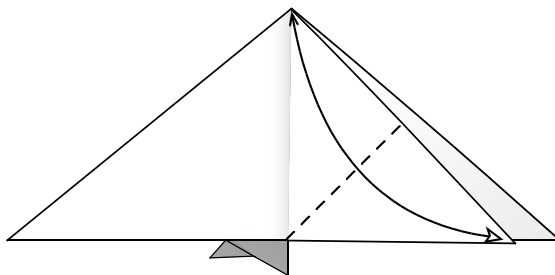29. Pleat the tail tip up on existing creases. Place this pleat on top of the tail folds on the right side.

30. Put ridge AB into the pocket on the right side of the tail tip pleat . Swing the locked tail assembly to the right.
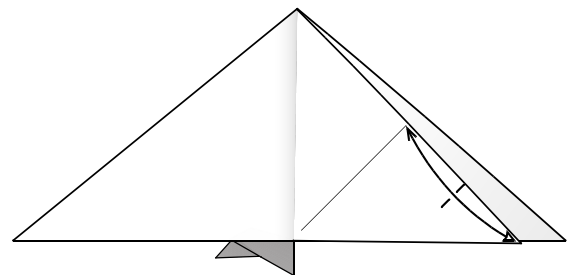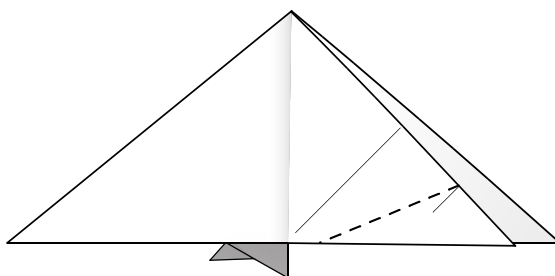
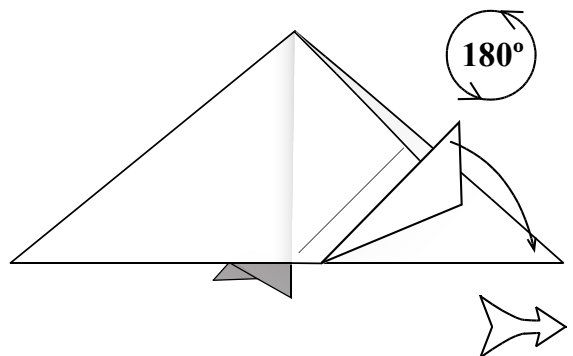In progress.

31. Turn the flat model over side to side.

32. Valley-fold and unfold an angle bisector.
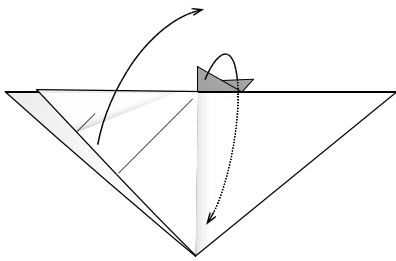
33. Pinch to bisect the distance.

34. Valley-fold the flap end up through the crease of the last step so that its raw edges are parallel to the crease of step 32.
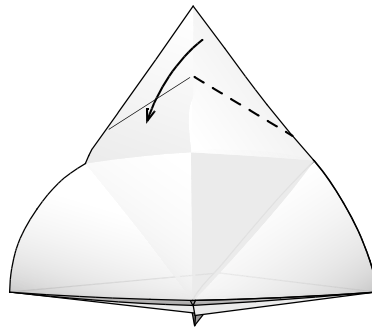
35. Undo the last fold and rotate the model 180 degrees.
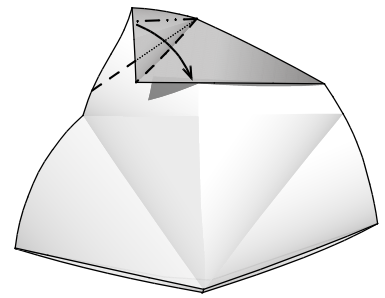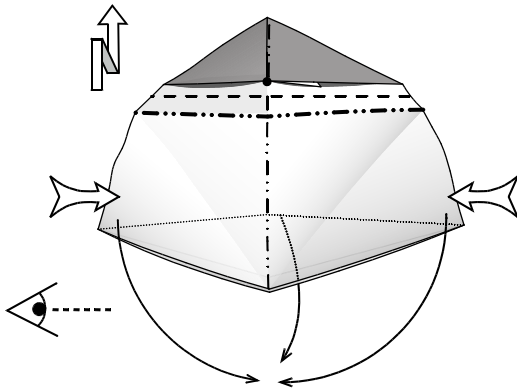
180°

4

36. Spread the top flap out. The tail will be in the middle of a side of a 3-sided pyramid.
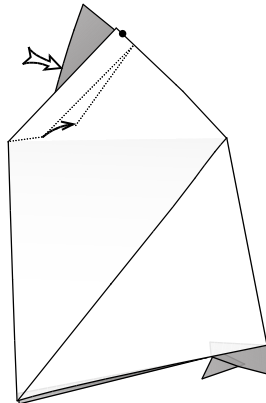
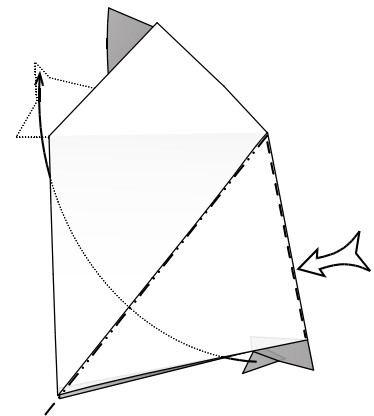37. Valley-fold the corner down on an existing crease.

38. Rabbit-ear fold a dorsal fin on existing creases with the corner inside.

39. Pleat the dorsal fin flap so that its bottom edge (dot) is just under the mountain fold (creased in step 32). Lower the tail and mountain-fold the model in half.
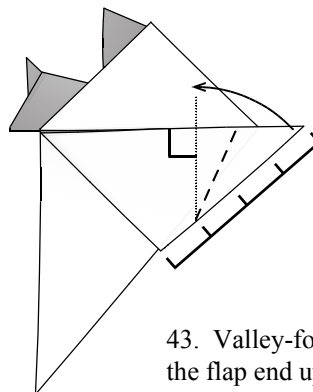
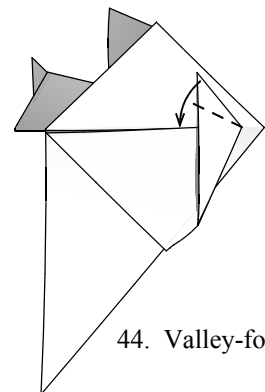40. Rotate the fin inside the body a little bit.

41. Inside reverse-fold the lower half of the model and place the tail between parts of the dorsal fin.
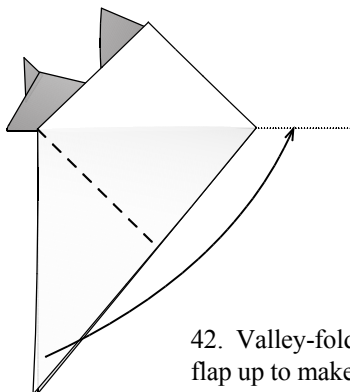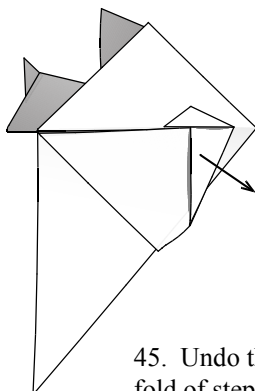
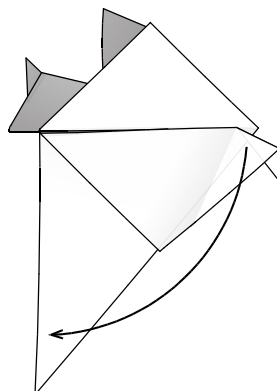42. Valley-fold the top flap up to make an eye.
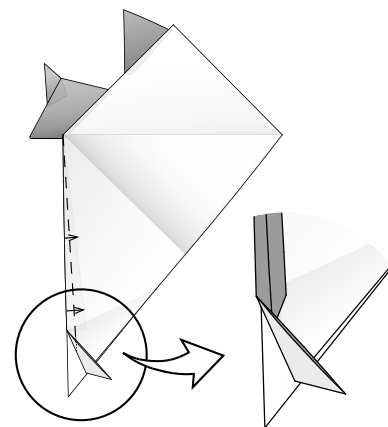
43. Valley-fold the flap end up.
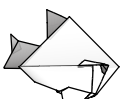
44. Valley-fold.

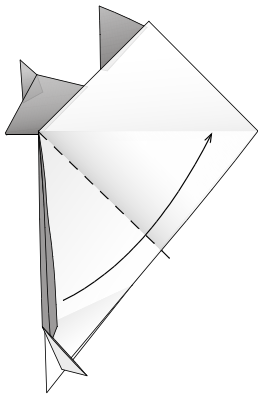45. Undo the valley fold of step 43.
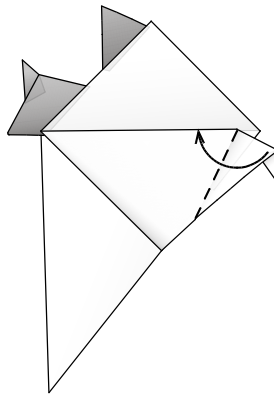
46. Fold the flap down.

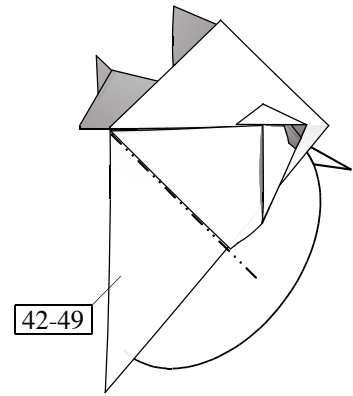47. Without undoing step 44, valley-fold the top edge to the tail.
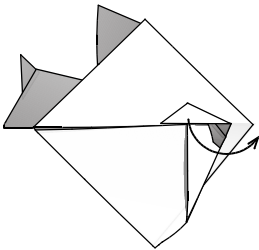
48. Valley-fold the eye flap up .

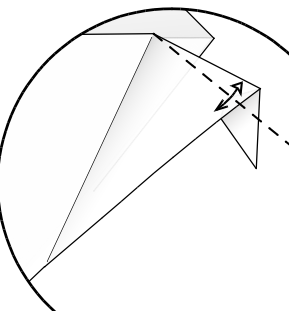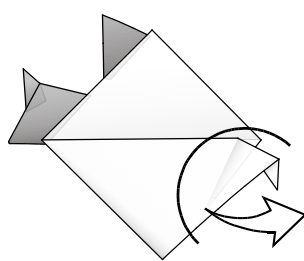49. Valley-fold the eye flap up once more on an existing crease.

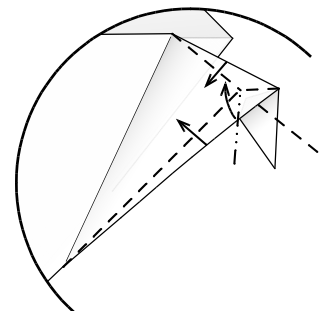50. Repeat steps 42 to 49 on the other eye flap.
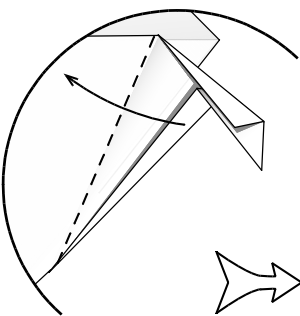
42-49

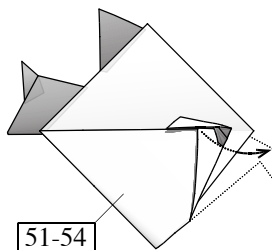**Go to step 63 or do these optional folds to narrow the eyebrow.**

51. Unfold step 49.

52. Valley-fold and unfold an angle bisector.
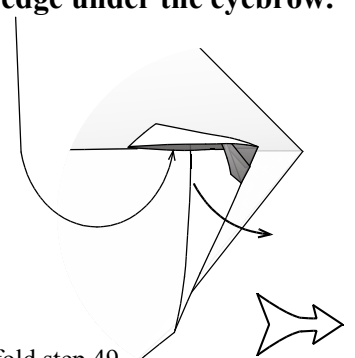
53. Rabbit-ear fold an "eyebrow" to narrow it.

Optional steps to get rid of a colored edge under the eyebrow.

54. Valley-fold the eye assembly up on the crease of step 49.
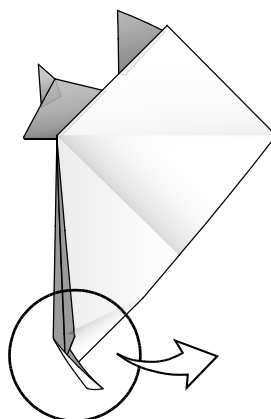
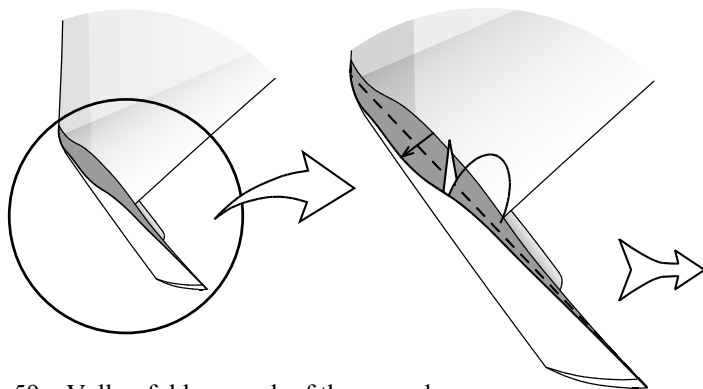55. Repeat steps 51 to 54 on the other eye flap.
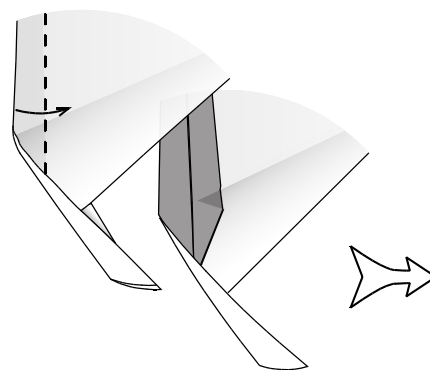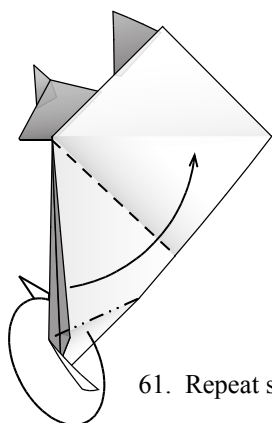
51-54
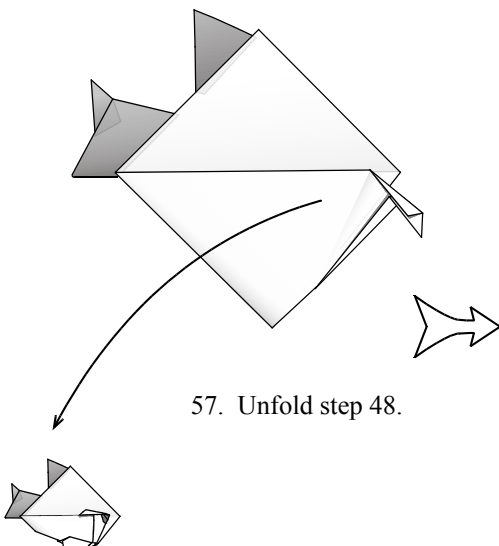
56. Unfold step 49.

57. Unfold step 48.

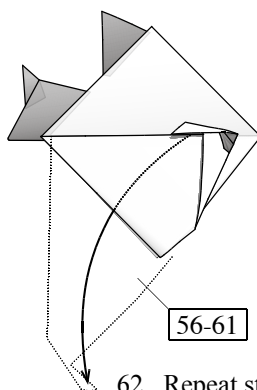58. Fold the raw edge back to the left.

6

59. Valley-fold as much of the raw edge as possible under the "eyebrow". I fold it first on top of the eyebrow edge and then tuck it underneath.
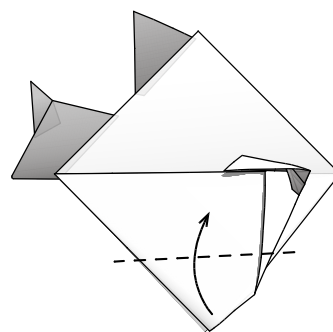
60. Valley-fold the edge back to the right. The colored edge under the eyebrow is now gone!
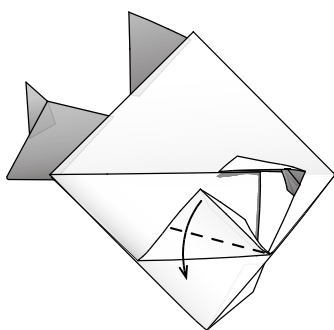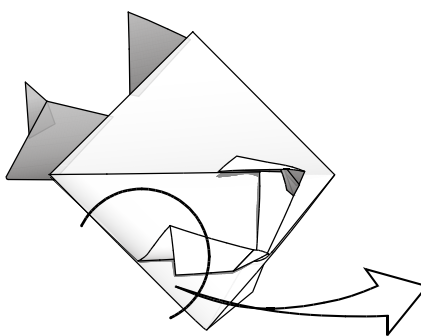
61. Repeat steps 48-49.
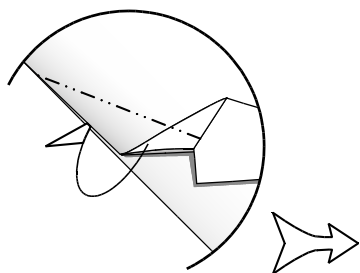
62. Repeat steps 56-61 on the other eye flap.

56-61

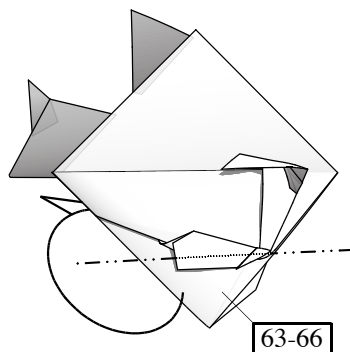63. Fold a corner up to make a pectoral fin.

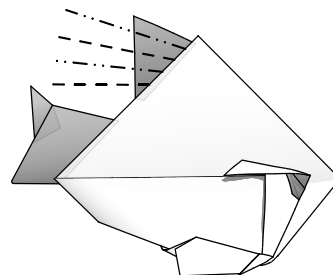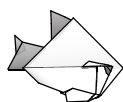64. Valley-fold the fin down. This fold is not an angle bisector.

65. Inside reverse-fold an edge to shape the pectoral fin.
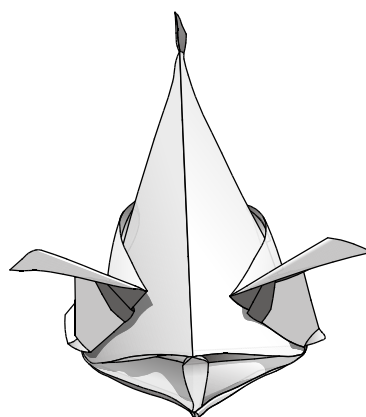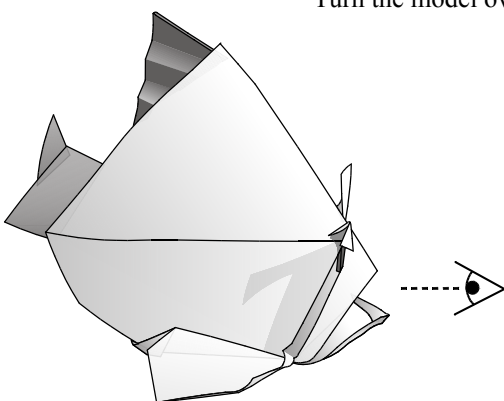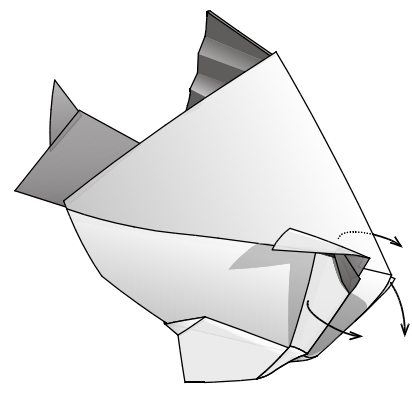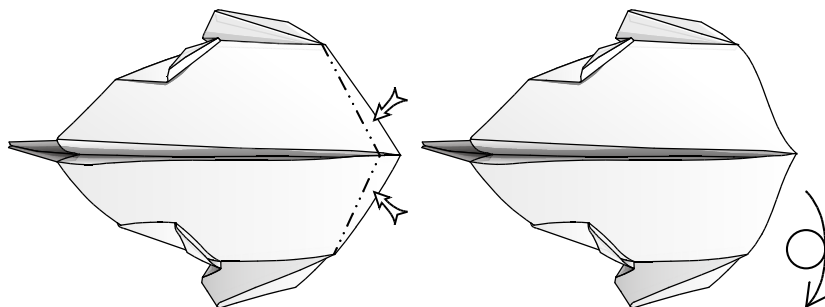
66. Mountain-fold a thick edge behind.

67. Repeat steps 63 to 66 on the other side.

63-66

68. Shape the dorsal fin.

AIR

69. Hold the parts of the tail together in one hand, grab the dorsal fin in the other hand, and blow into the hole between the tail and dorsal fin. Turn the model over.

70. Pinch the lower jaw layers together and mountain-fold them. Turn the model over.

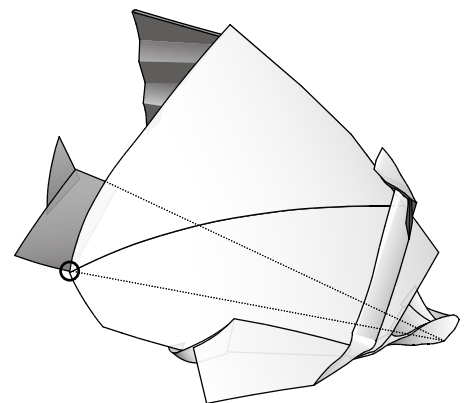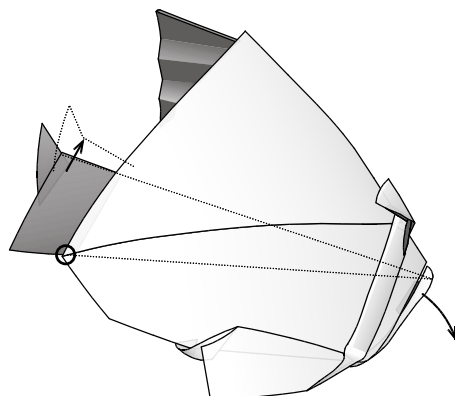71. Pull open the lower jaw. Swing eye flaps forward.
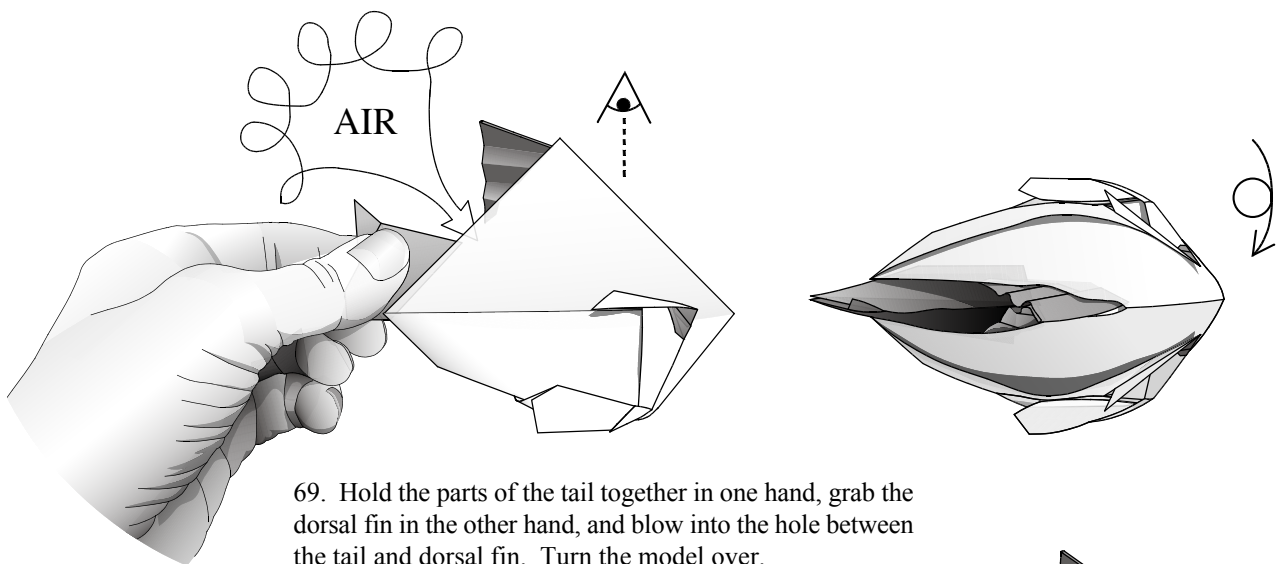
Finished Angry Fish!

While holding the fish by the dorsal fin, rotate the flat tail with your other hand around its fulcrum (open circle) to open and close the jaw. The eyes move also.