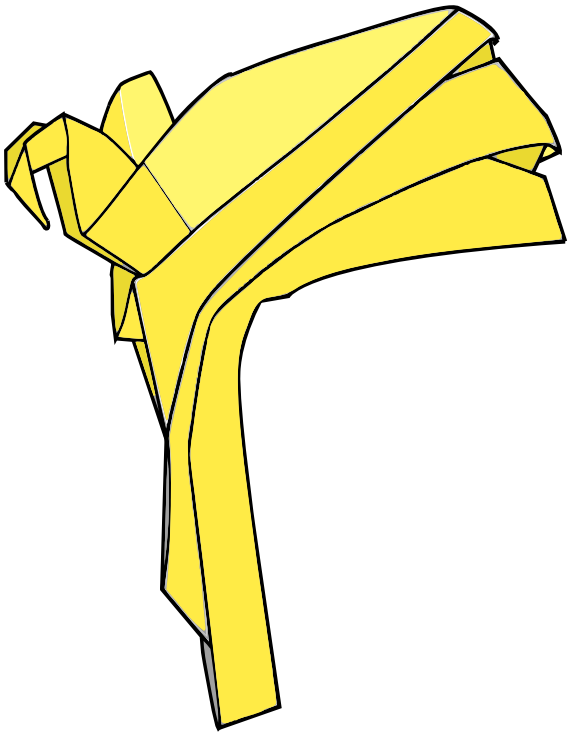
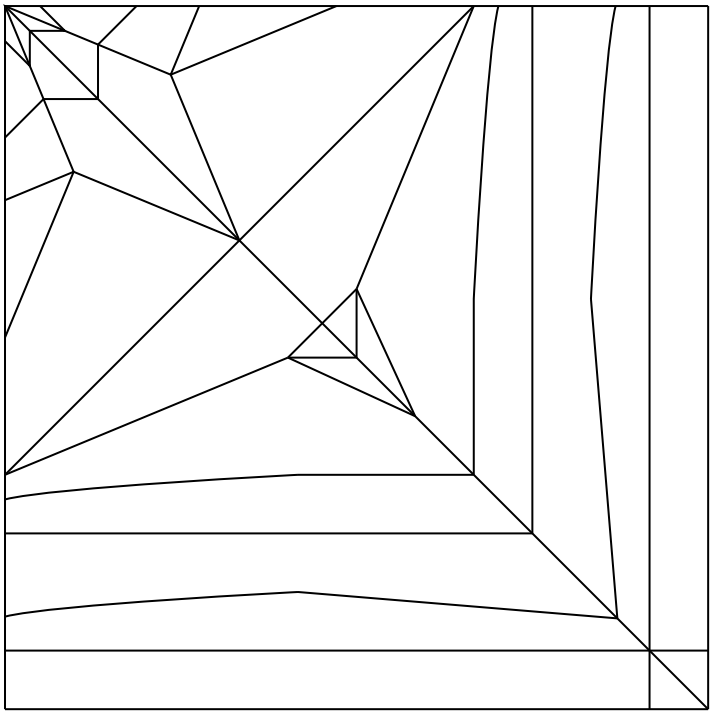
C3 Parrot

For Mr. Bermel's Calculus 3 class

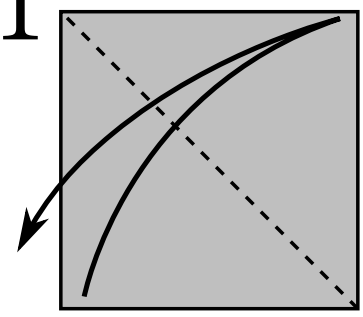
by Raymond Zhao
with permission of David Mitchell.





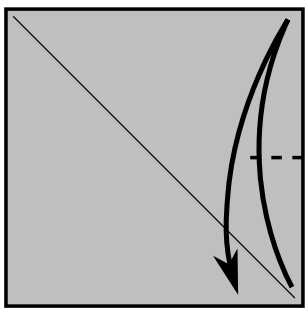
Inspired by David Mitchell's "Flapping Parrot" diagrammed in *Complete Origami*, this design incorporates additional grafts of paper to create feathers. The neck is modified with a swivel fold to streamline the wing while releasing trapped paper for a larger head.

1



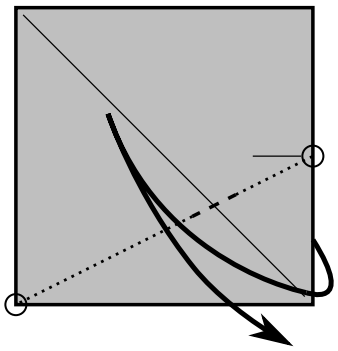
Color side up.
Fold and unfold.

2



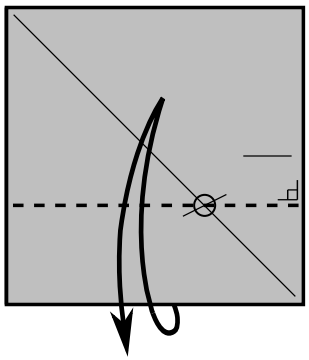
Mark the center
of the edge.

3



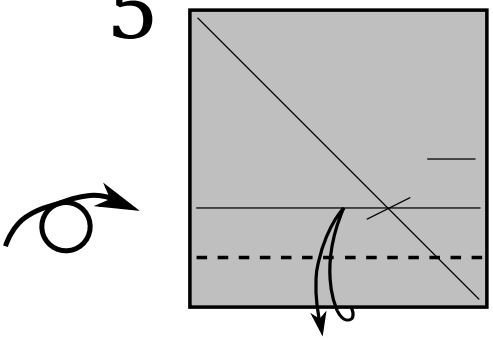
Mark the line connecting
the circule points at the
diagonal.

4



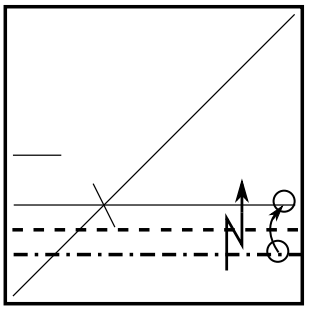
Fold the bottom edge up through the circled intersection.

5



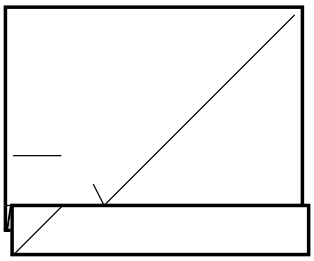
Fold the bottom edge to the existing crease.

6



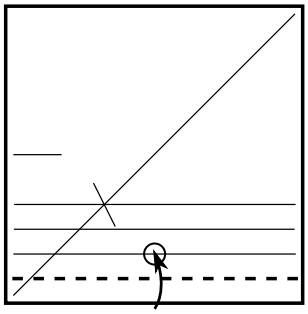
Pleat aligning the circled edges.

7



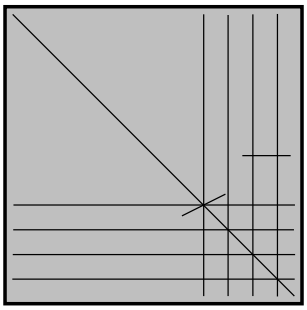
Result of Step 6.

8



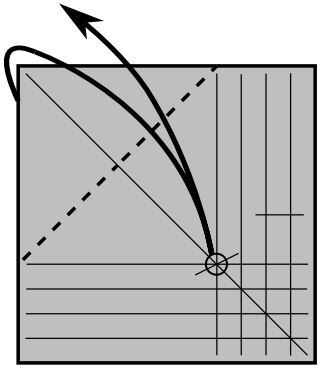
Unfold. Fold and uthe bottom edge to the indicated crease.

10



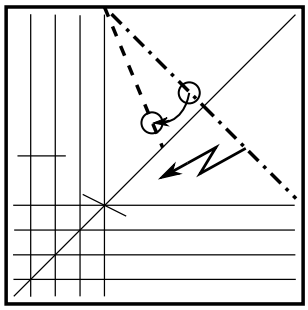
Unfold. Turn the model over.

11



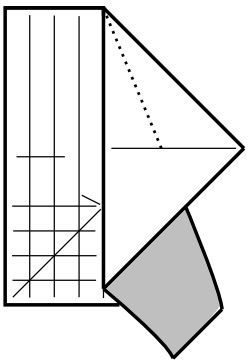
Fold the tip to the circled intersection of creases.

12



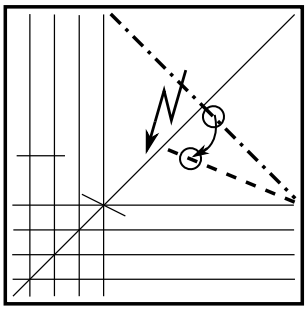
Fold an angle bisector by aligning the circled creases.

13



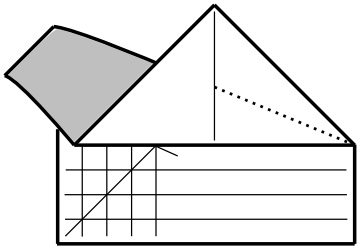
Only crease the portion indicated by the dotted line.

14



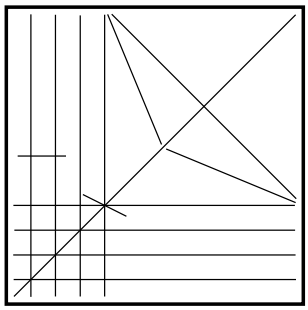
Unfold and repeat steps 12-13 on other side.

15



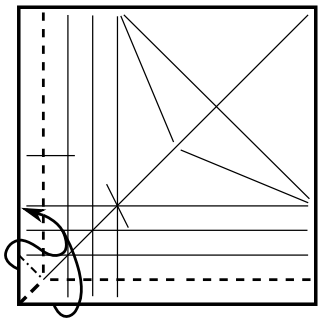
Only crease the portion indicated by the dotted line.

16



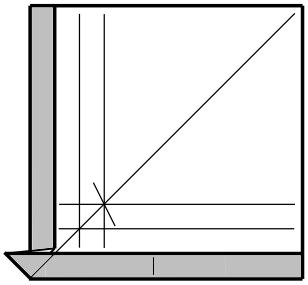
Unfold.

17



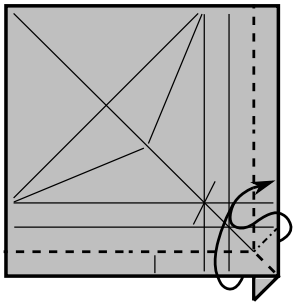
Rabbit ear using existing creases and collapse the tip to one side.

18



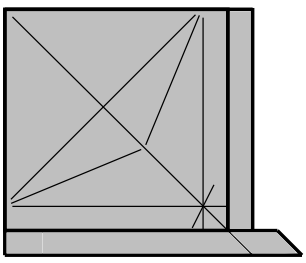
Result of Step 17.
Turn the model over.

19



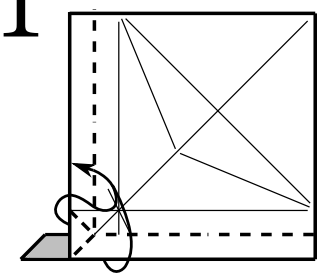
Repeat Step 18.
letting the tip swing outwards to one side.

20



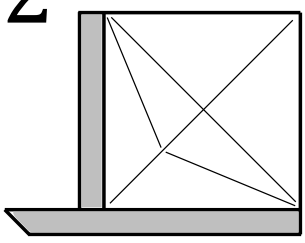
Result of Step 19.
Turn the model over.

21



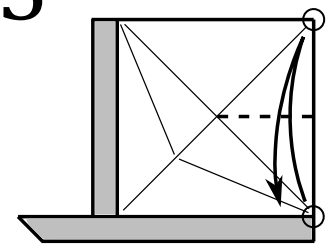
Repeat Step 19.

22



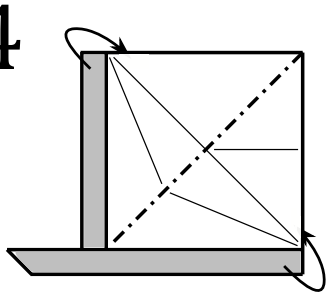
Result of Step 21.

23



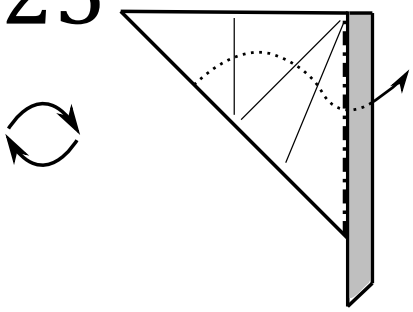
Mark the midpoint of the right edge by bringing the tip to the circled point.

24



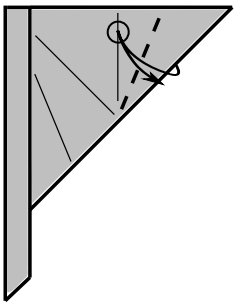
Fold the model in half letting the "rabbit ear" swing forward.

25



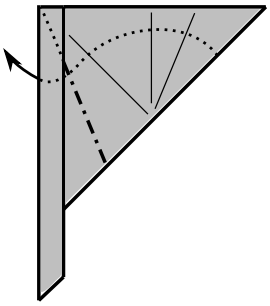
Inside reverse fold using existing creases.

26



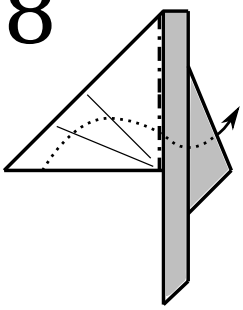
Fold and unfold an angle bisector by bringing the edge to the circled crease.

27

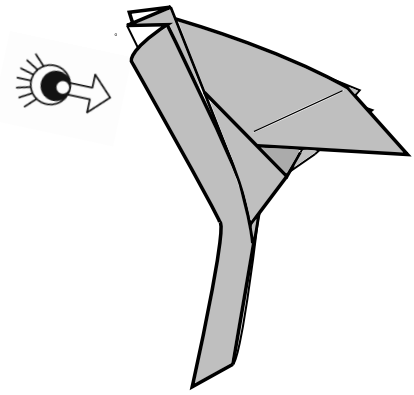


Inside reverse fold using existing creases.

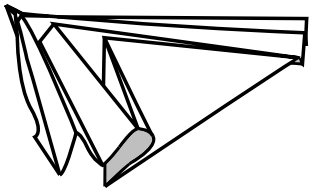
28

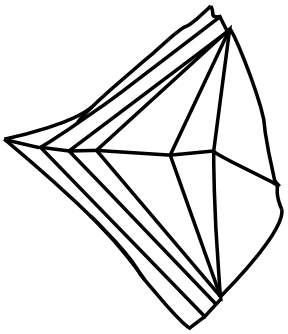


Inside reverse fold using existing creases.

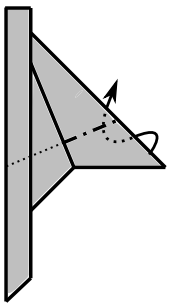


Additional Views



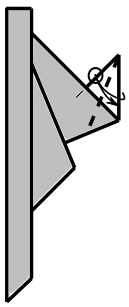


29



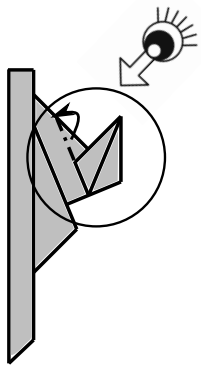
Inside reverse fold using existing creases.

30

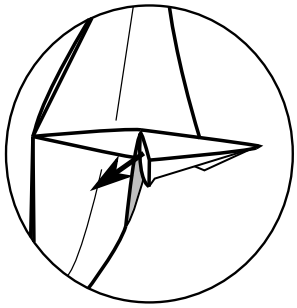


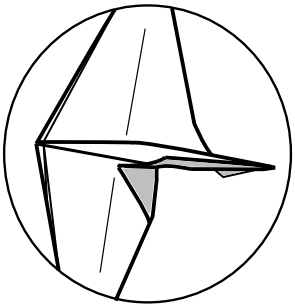
Fold an angle bisector.

31

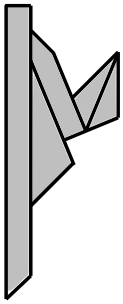


Mountain fold, or swivel, the edge of the wing back as far as possible



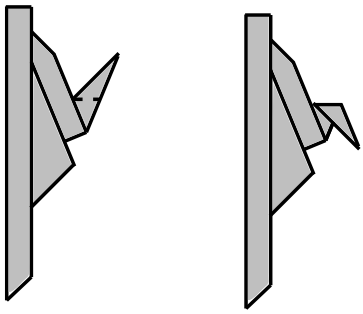


Step 31 in progess...



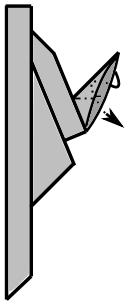
Result. Repeat Step 31 on the other side.

32



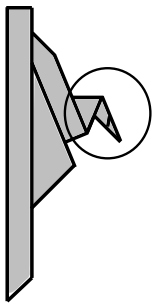
Fold and unfold to form the head. Angle is to taste

33



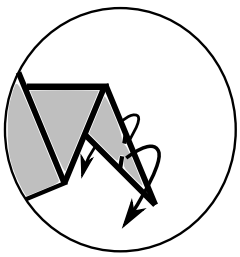
Inside reverse fold.

34

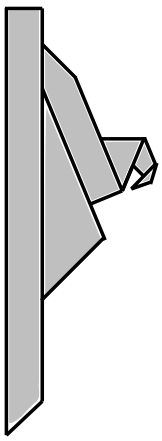


Fold and unfold to form beak. Angle is to taste.

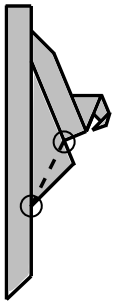
35



Outside reverse fold.

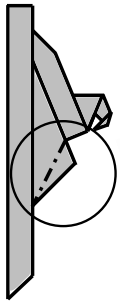


36

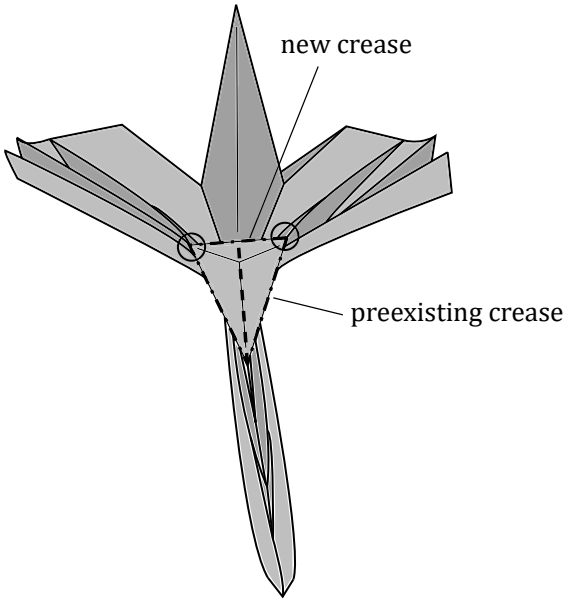


Fold and unfold to connect the circled points.

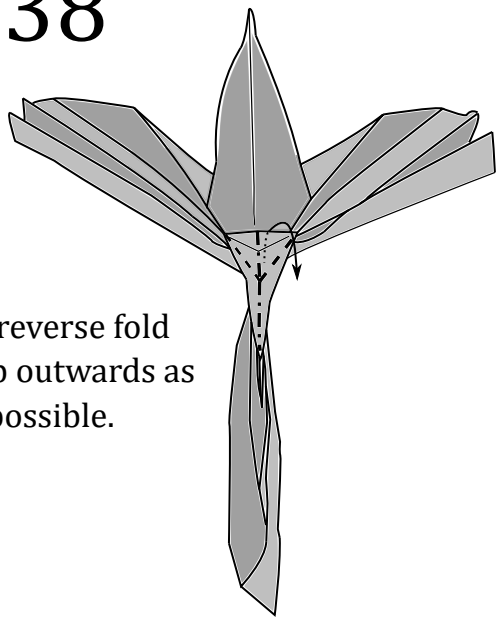
37



Open the model and squash sink the corner.

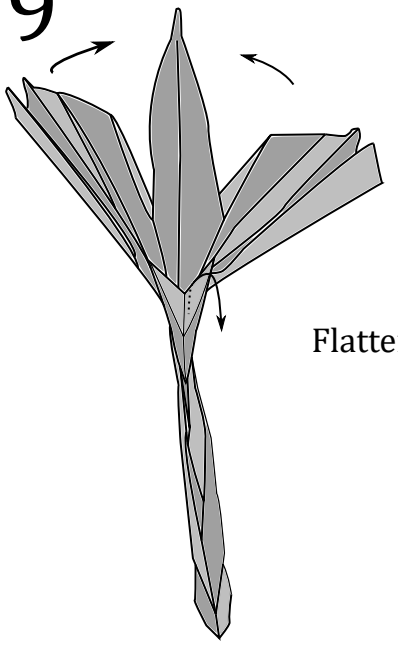


38

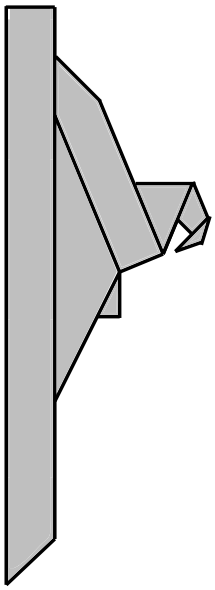


Inside reverse fold the flap outwards as far as possible.

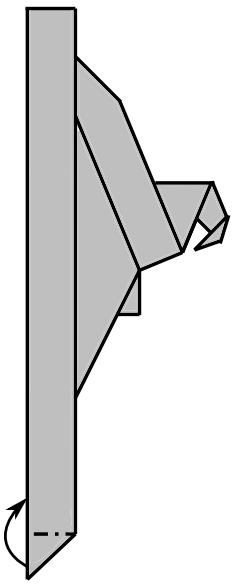
39



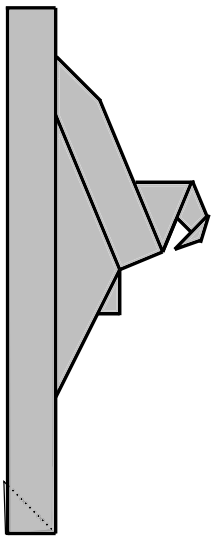
Flatten.



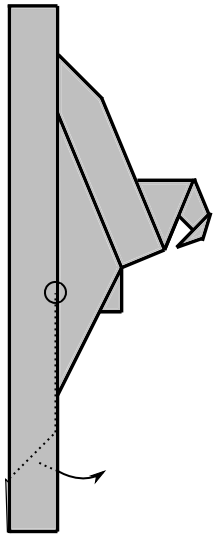
40



Inside reverse fold the tip of the tail.

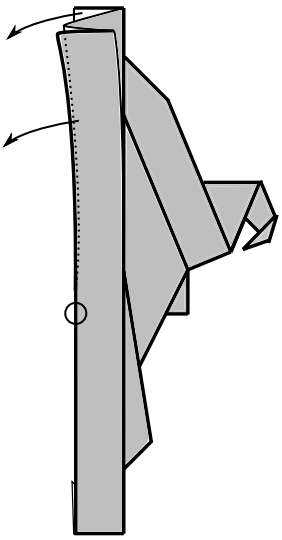


41



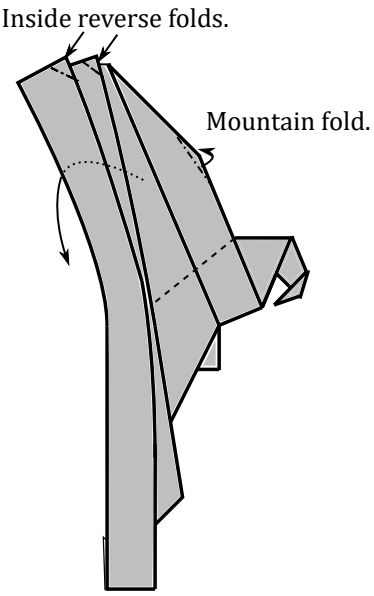
Pull a corner out to create a feather. Use the circled point as an anchor/pivot for the swivel.

42



Use the circled point as an anchor or pivot to slide and separate the pleats.

43



Shape to taste.