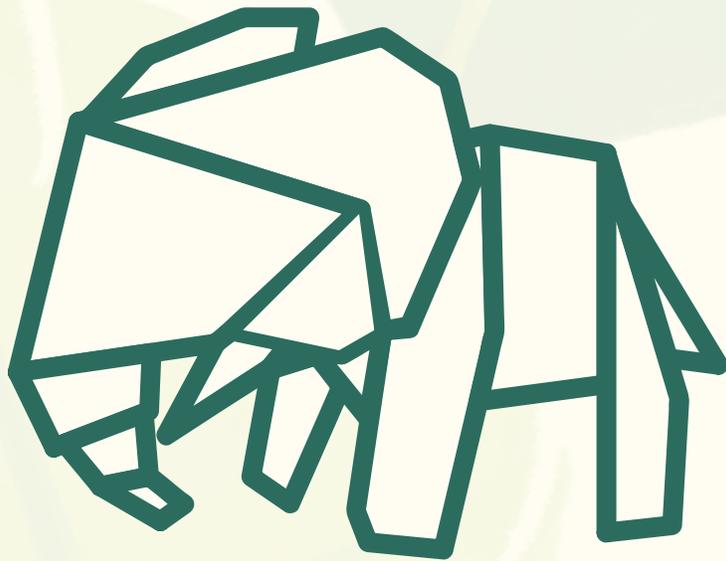


EAST BAY  
ORIGAMI  
CONVENTION

2023



COLLECTION OF ORIGAMI

# Foreword

## Publishing Information

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Cover art by Ellen Truong

Edited by Albert Tran

## About EBOC

The East Bay Origami Convention (EBOC) is a (typically) annual event hosted by Cal Origami at UC Berkeley! EBOC is dedicated to supporting the San Francisco Bay Area origami community and is open for anyone to attend. We have workshops by origamists and origami hobbyists, a convention ebook of diagrams and crease patterns, and fun activities for attendees to interact with and enjoy the local origami community!

## About Cal Origami

Creative Applications to Life in Origami (CAL Origami) is the only origami focused student organization at UC Berkeley. We explore both the beauty and the mathematical principles and concepts of the traditional Japanese art of origami. Our goal is to find further use of origami in our daily lives and reach out to the local community to teach practical applications. This includes being a relaxation activity to lower stress levels as well, exploring origami design techniques, and learning more about the mathematical basis of origami folding.

**Website:** <https://calorigami.berkeley.edu/>

**Email:** [calorigami@gmail.com](mailto:calorigami@gmail.com)

**Discord:** <https://calorigami.berkeley.edu/discord>

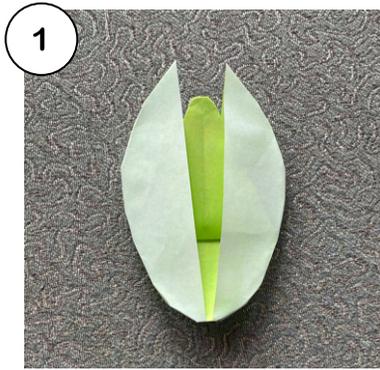
**Instagram:** <https://instagram.com/calorigami>

**Facebook:** <https://www.facebook.com/groups/calorigami/>



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Celine Yon



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Bradley Tompkins



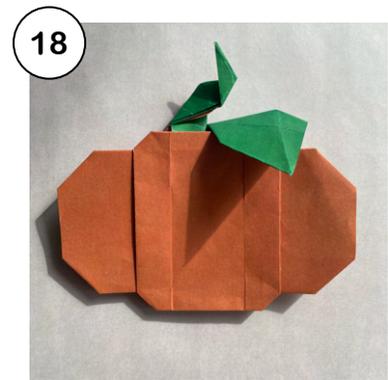
**Seahorse**  
Kelly Tan



**Mockingjay**  
Isaac Langer



**Dragon Head**  
Abhik Ahuja



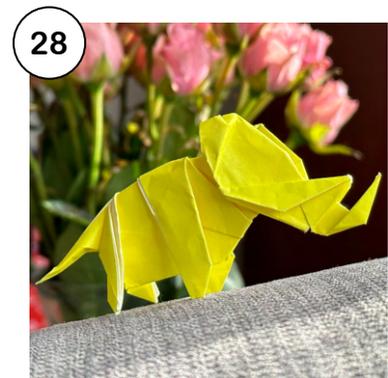
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Albert Tran



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**Septopus**  
Albert Tran

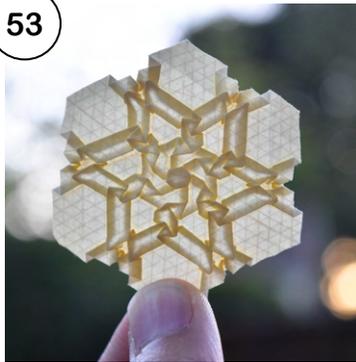
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Jacob Stebleton

57

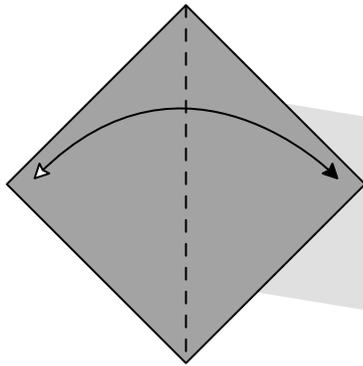
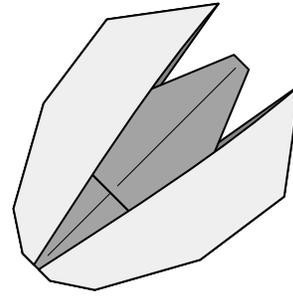


**Gehrman**  
Colton Wang

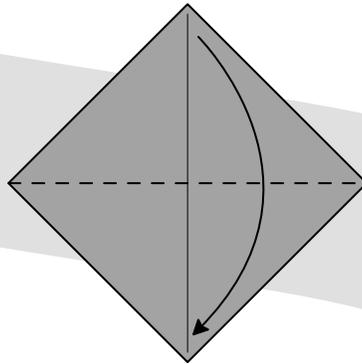
# Pistachio

Model by Celine Yon, Diagrams by Albert Tran

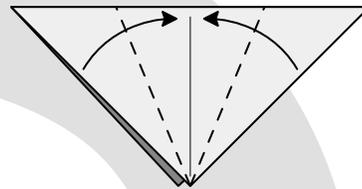
Recommended size: 15 cm.



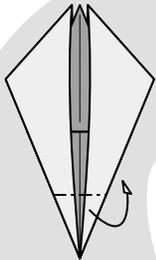
1. Fold in half and unfold.



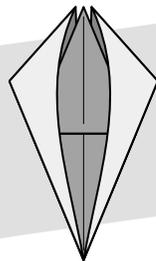
2. Fold in half.



3. Bring the edges to the center.

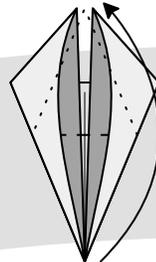


4. Open the top layers slightly.

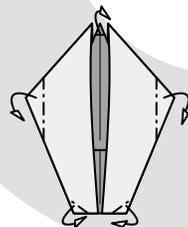


5. Fold the inside corner up underneath the top layers.

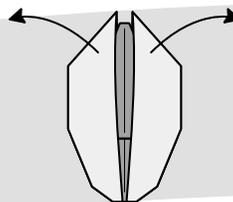
6. Close the layers.



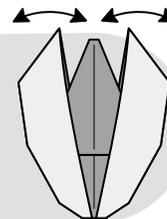
7. Fold the corner behind.



8. Round out and shape to taste.



9. Open the shell.

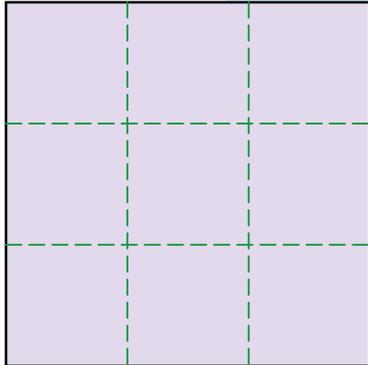


10. The completed Pistachio. You can close the shell and crack it open again!

# Seymour Box

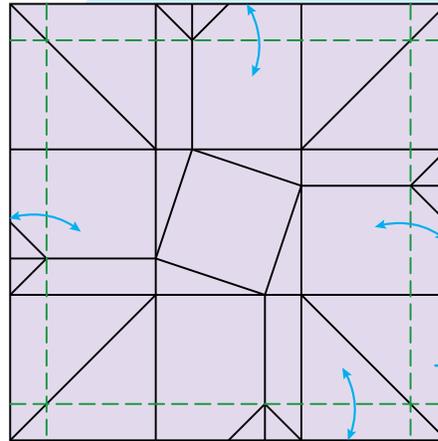


1



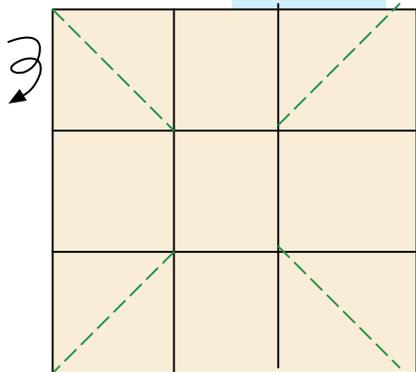
Color side up, crease in thirds.

6



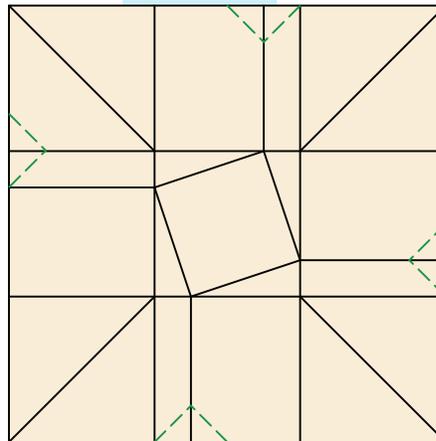
Turn paper over and valley crease edges as shown.

2



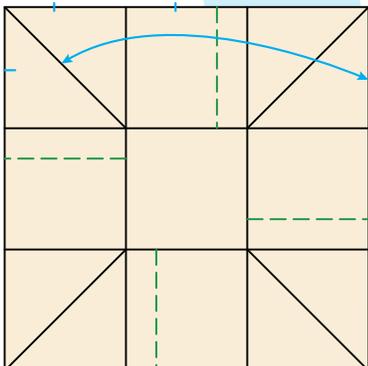
Turn over and valley crease diagonals through corner planes.

5



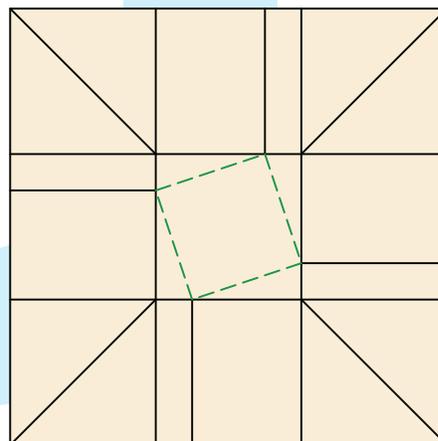
Form valley creases. Tip: flop paper along valley crease and form triangle, then reverse one crease.

3



Valley crease as shown (align the right edge to the opposite 1/6 mark and crease only in top center square. Rotate and repeat).

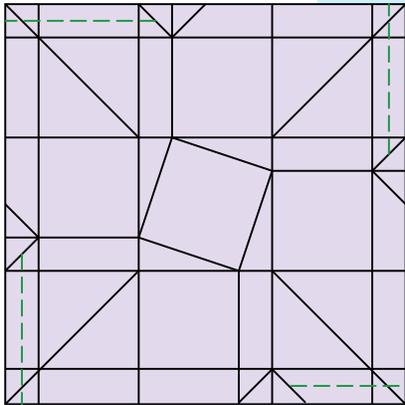
4



Valley crease diagonals in center square using intersections of previous step as landmarks.

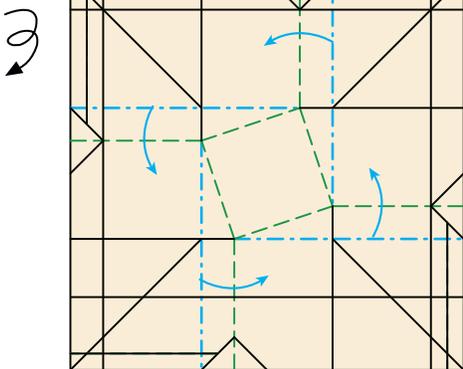
1

7



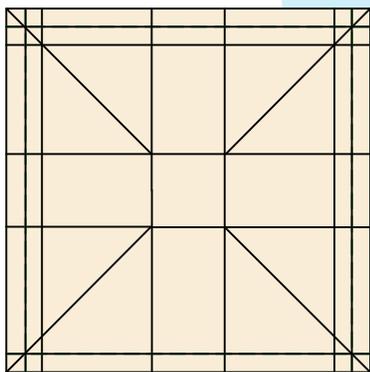
Crease edge to line made in step 6, only to the right of triangle, as shown.

8

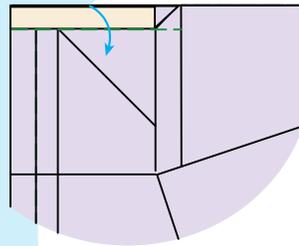


Turn over and swivel mountain structures to the left.

9

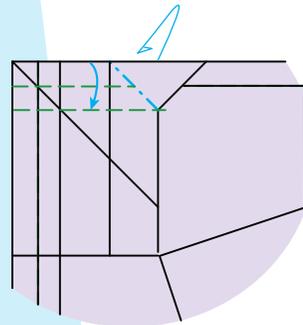


12



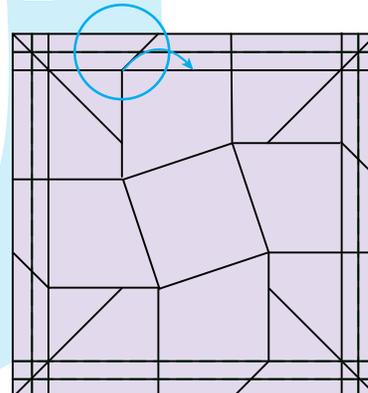
Fold flap down again along valley crease line.

11



Fold down edge along crease line.

10

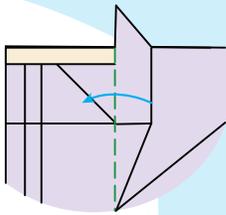


Turn over and open to reveal underlying V structure.

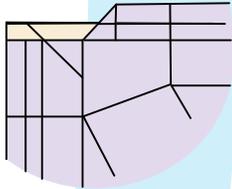
2

Designed and Diagrammed by Bradley Tompkins • Geneva Origami Convention 2023

13



Flop outer wall structure back into place (from step 10).

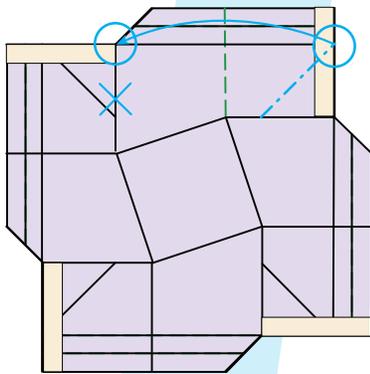


View after last step.

Repeat 10-13 for all four sides.

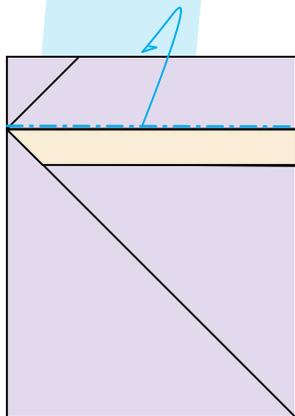


14



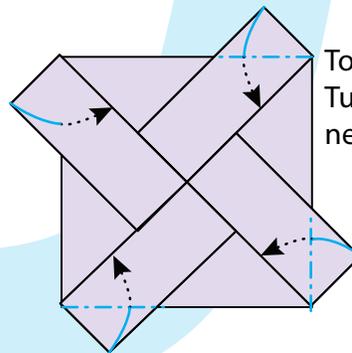
Hold model at X point shown and swivel diagonal structure left until points meet. Model becomes 3D. Repeat for other sides.

15



One side shown. Drop top flap onto top surface of box and interlace with adjacent flaps. Rotate and repeat for all sides.

16



Top view shown. Tuck flaps underneath rim.

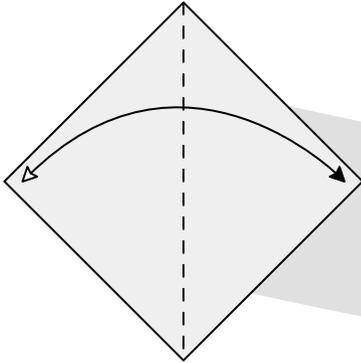
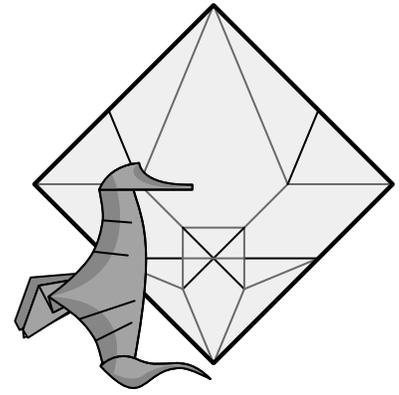
3



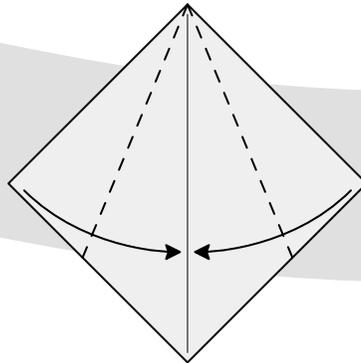
more single-sheet origami diagrams, books and photos.

# Seahorse

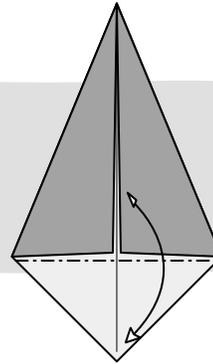
Model by Kelly Tan, Diagrams by Albert Tran  
Recommended size: 15 cm.



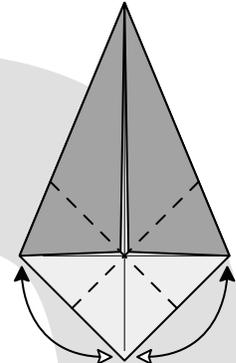
1. Fold in half and unfold.



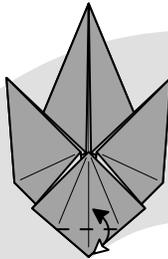
2. Bring the edges to the center.



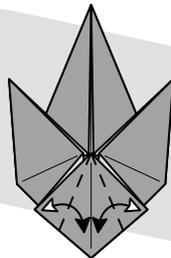
3. Mountain fold and unfold the corner.



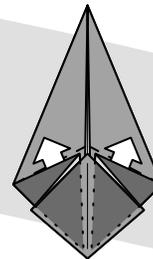
4. Fold the bottom corner to the side corners and unfold.



5. Collapse using the existing creases.

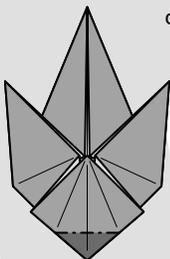


6. Pull out the hidden corners.

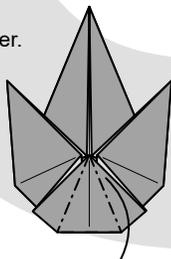


7. Bring the edges to the center and unfold.

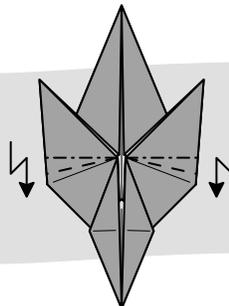
8. Fold between the creases and unfold.



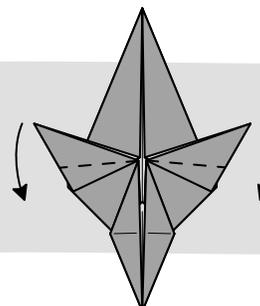
9. Open-sink the corner.



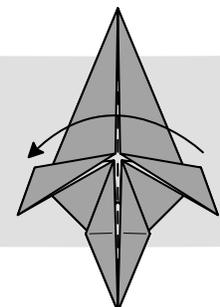
10. Petal-fold the corner.



11. Pleat the side flaps.



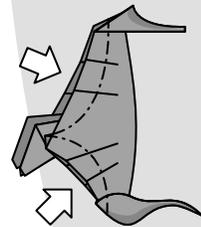
12. Fold the corners down.



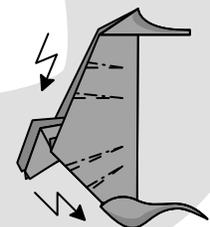
13. Fold in half and zoom in.



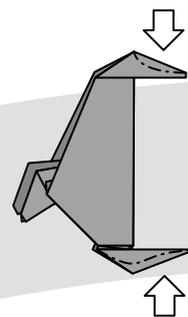
19. The completed Seahorse.



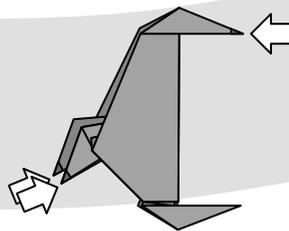
18. Round out the body.



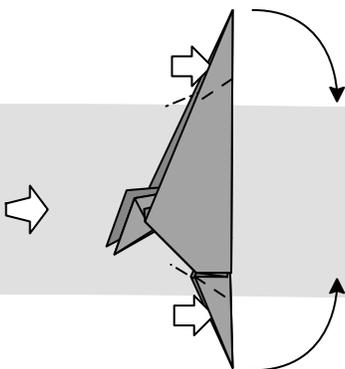
17. Pleat along the body on both sides.



16. Thin and round out the head and tail.

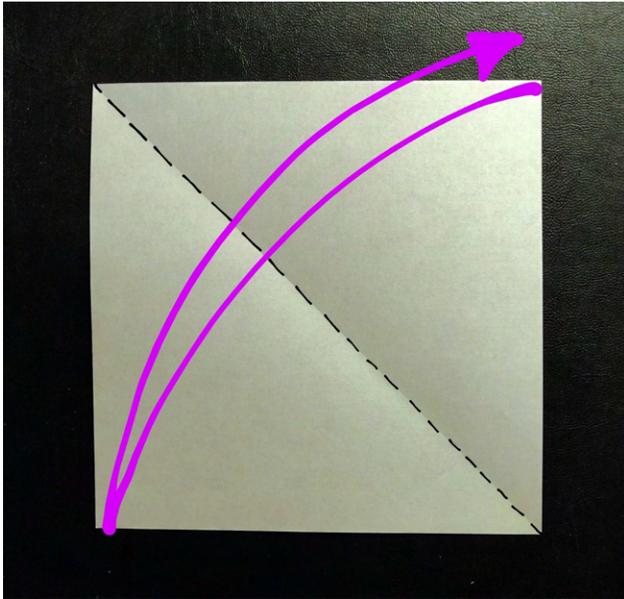


15. Inside reverse-fold the tips of the snout and fins.



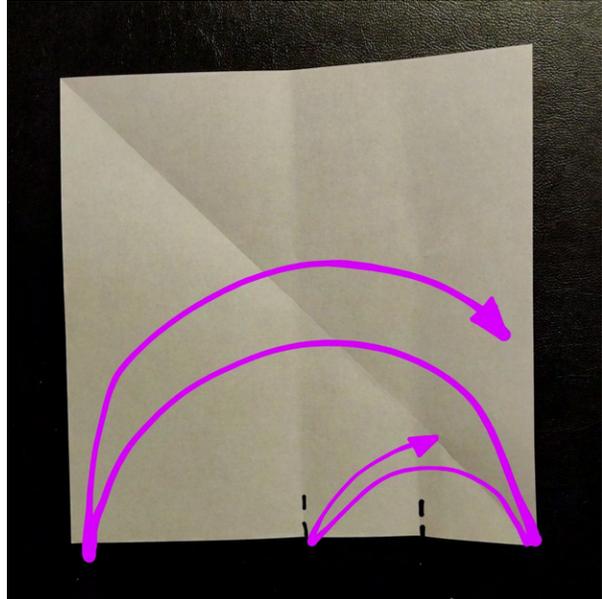
14. Outside reverse-fold the top and bottom corners.

1.



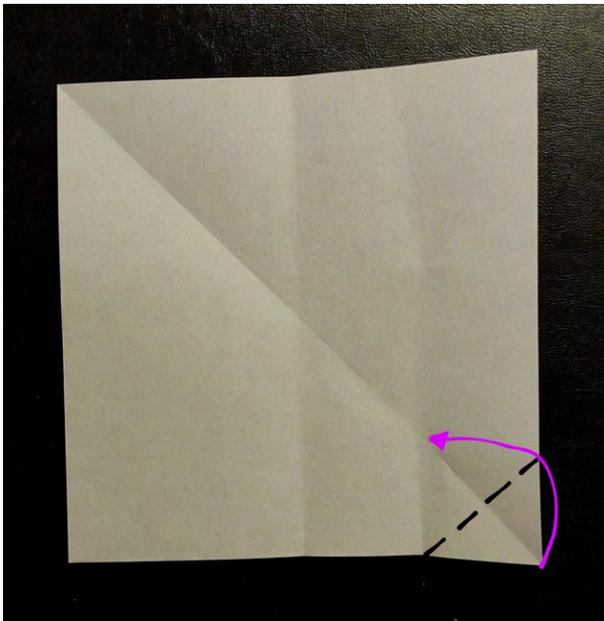
Start with the white side up.  
Crease the diagonal.

2.



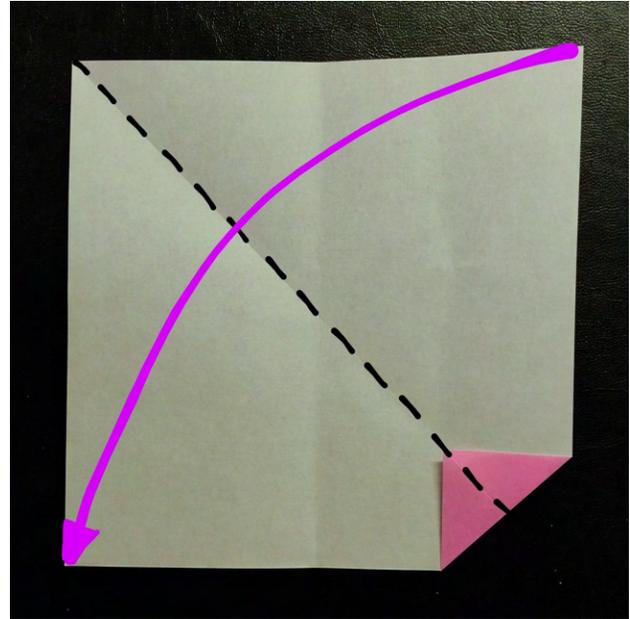
Fold in half and pinch at the  
bottom, then pinch the quarter  
mark.

3.



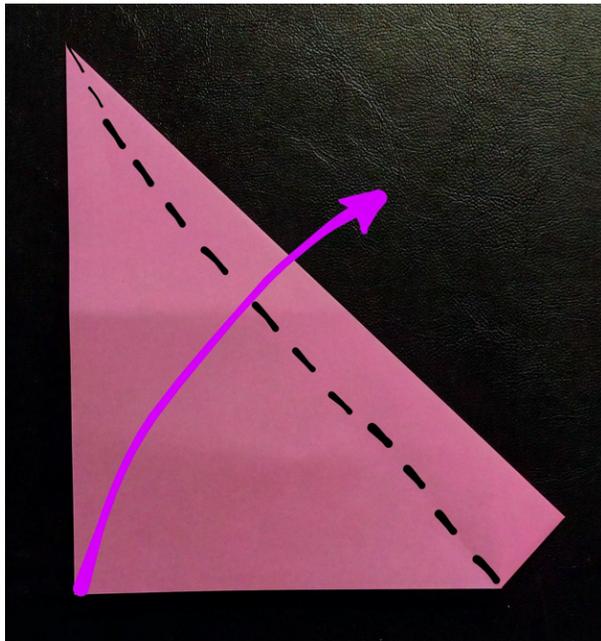
Fold the bottom right corner  
perpendicular to the diagonal,  
starting at the quarter pinch mark.

4.



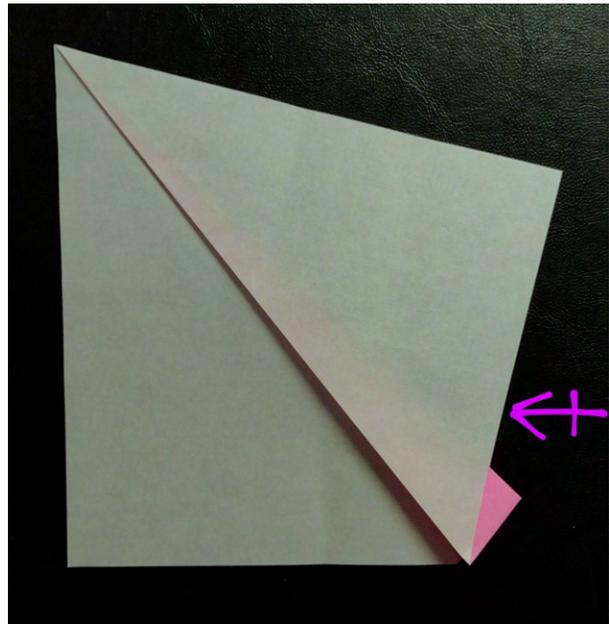
Fold along the diagonal.

5.



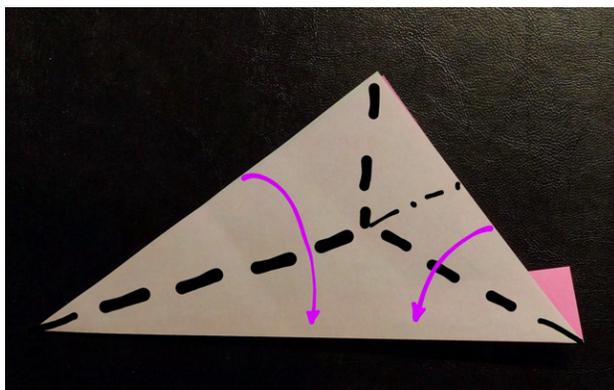
Make a fold connecting the two corners as shown.

6.



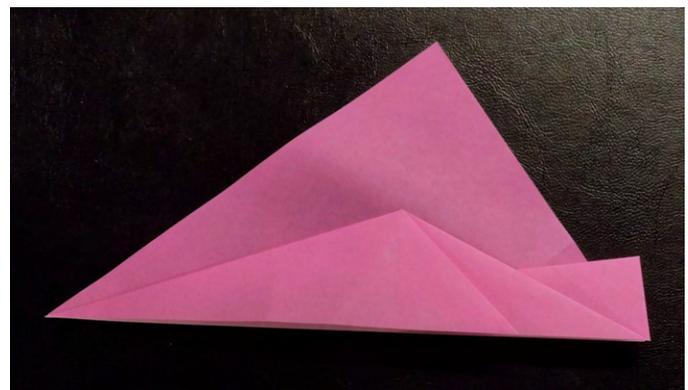
Repeat behind. Rotate 45°.

7.



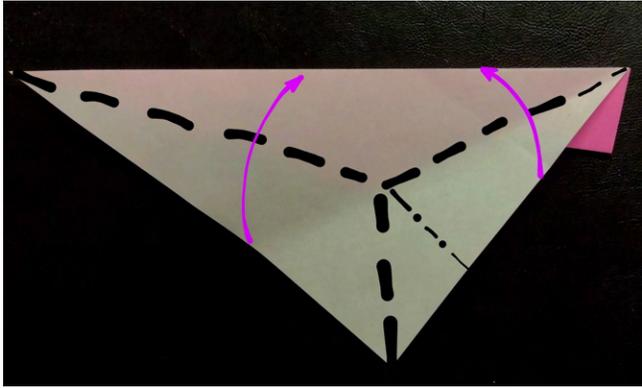
Rabbit-ear the top layer.

8.



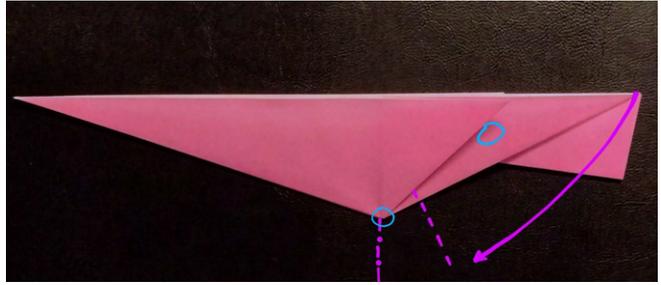
Flip over from top to bottom.

9.



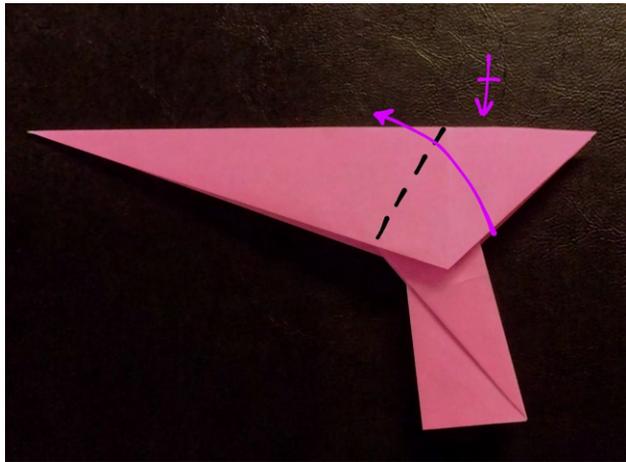
Rabbit-ear again.

10.



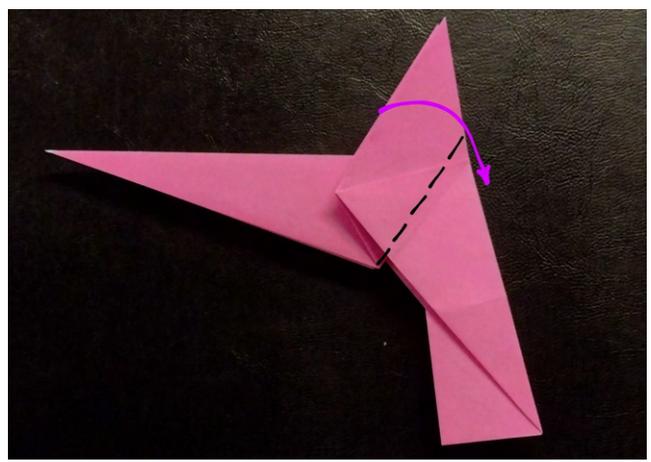
Crimp the tail so that the bottom corner lies in the middle of the triangle on the right. The internal layers will not be arranged symmetrically.

11.



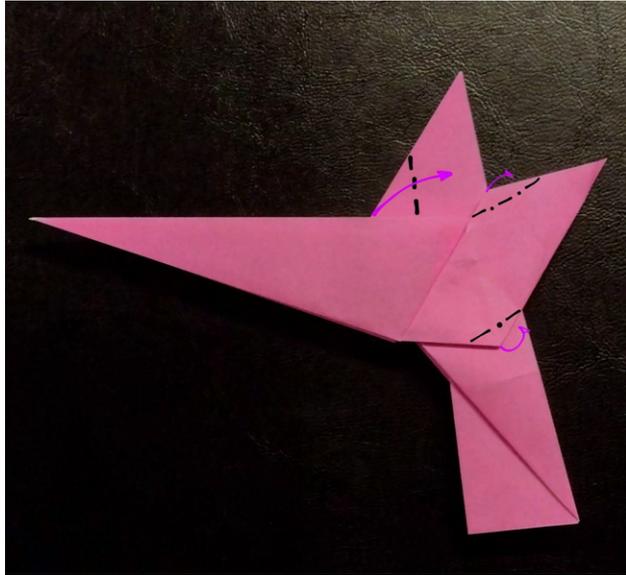
Fold the wings forward in front and behind.

12.



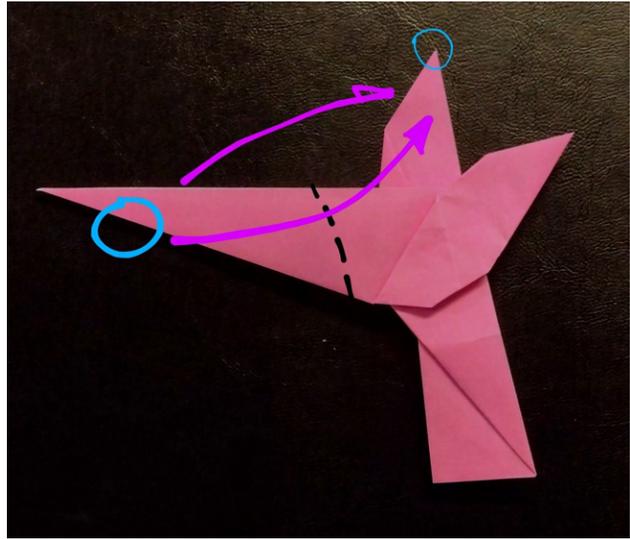
Fold the front wing to the right on a new crease.

13.



Fold the corner of the back wing as far as it will go. Round the corners of the front with mountain folds.

14.



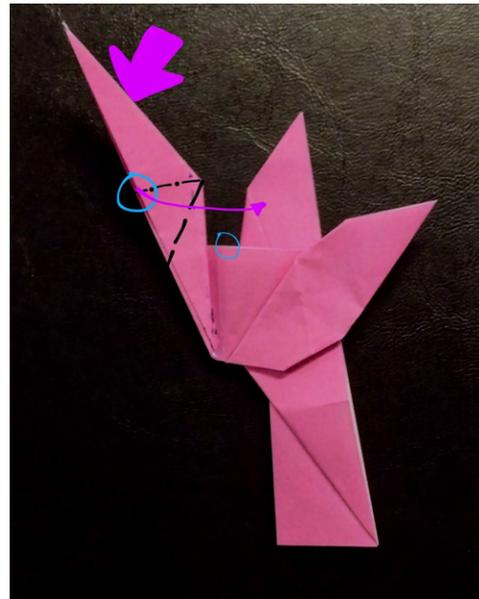
Outside reverse fold the neck so the bottom edge hits the tip of the back wing. Leave a small gap between the bottom of the neck and the bottom of the front wing.

15.



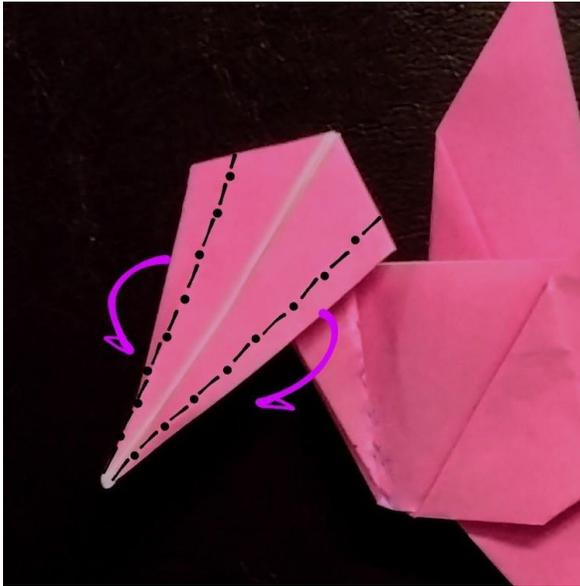
Outside reverse fold.

16.



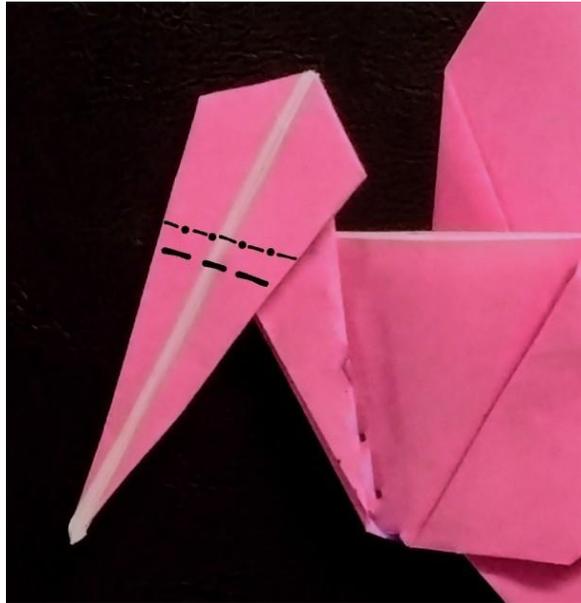
Squash fold so the corner of the head hits the top edge of the body and the head is roughly parallel to the front wing.

17.



Narrow the head by 1/6 on each side with mountain folds.

18.



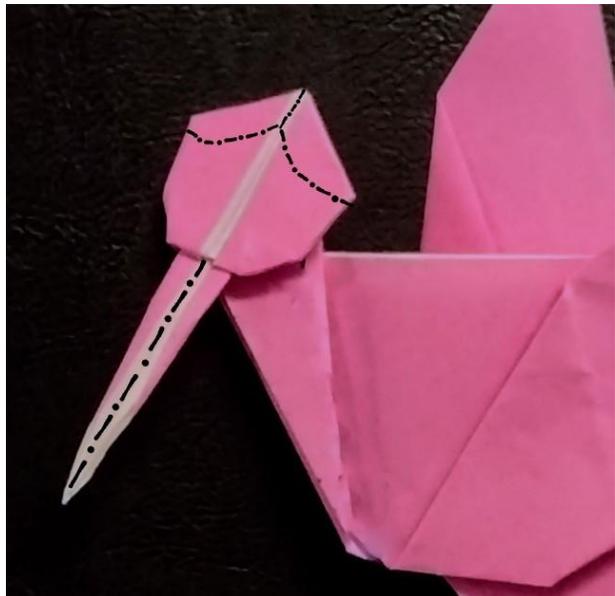
Pleat to form the beak.

19.



Narrow the beak and round the head with squash folds.

20.



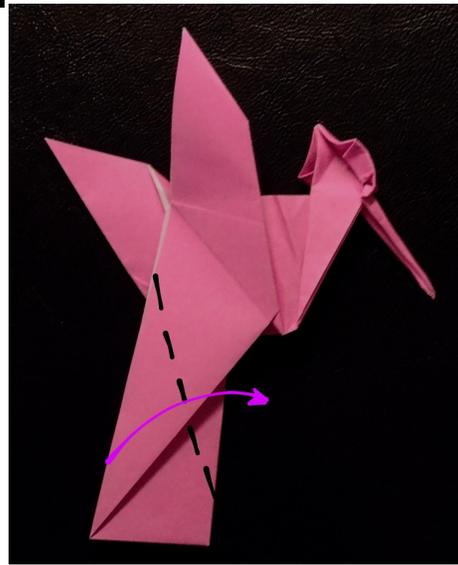
Shape the head with soft creases.

21.



Flip the model over from left to right.

22.



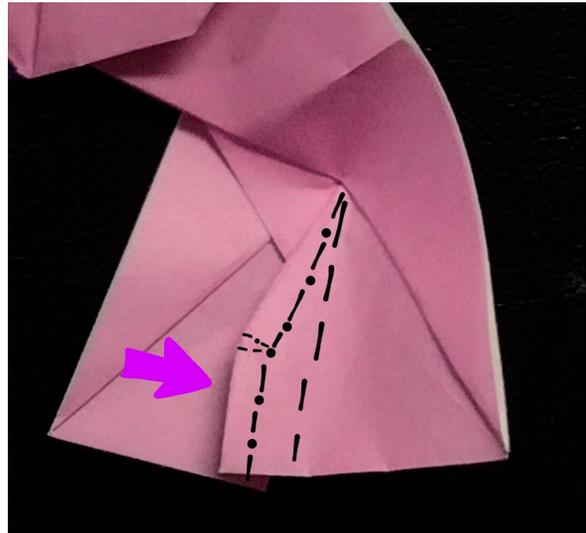
Valley fold the top layer, flipping the tail inside out. Flip back over.

23.



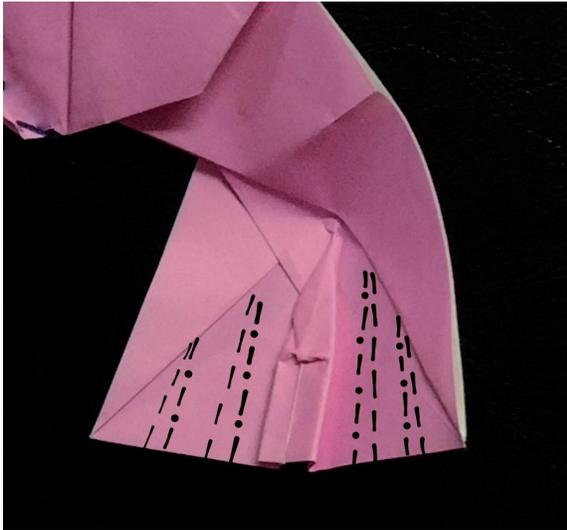
Closed sink.

24.



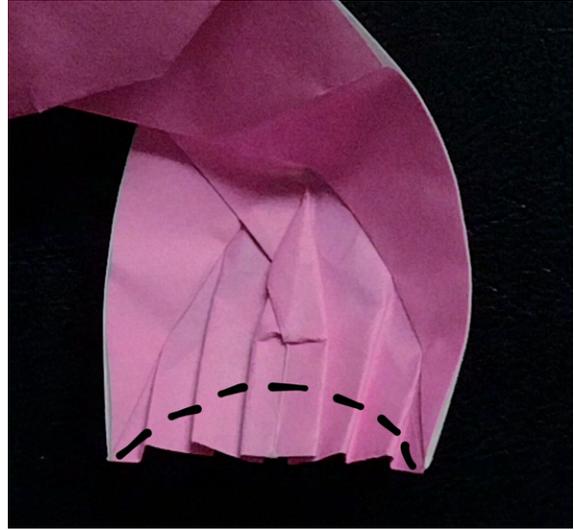
Squash symmetrically.

**25.**



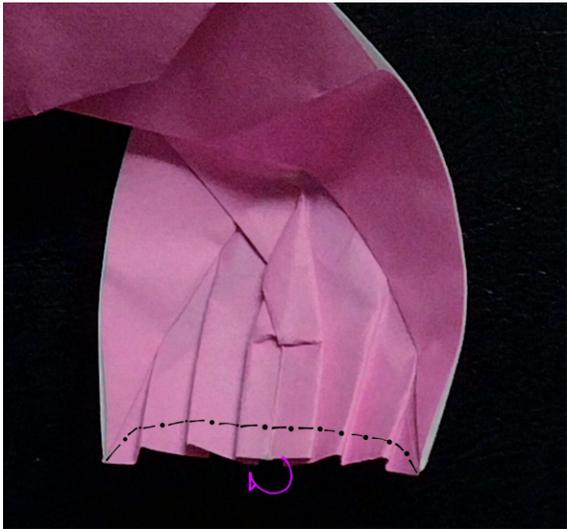
Form more tail feathers with pleats.

**26a.**



(simplified version) Round the bottom of the tail with a curved valley fold.

**26b.**



Round the bottom of the tail with a curved mountain fold, swiveling on the pleats to complete the fold.

**27.**



Completed tail.

28.



Pleat the wings to form feathers.

29.



Curve the back to narrow the body.  
Shape to taste.

30.



Completed mockingjay



Designed by Isaac Langer (November 2013)

# Dragon Head

Recommended paper: foil

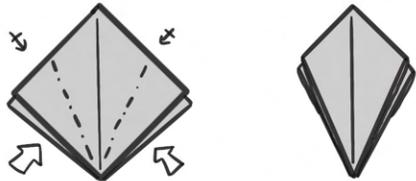
1. Fold a Preliminary base



2. Fold edges to center and unfold



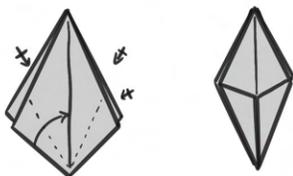
3. Reverse fold



4. Rotate 180°



5. Fold edges to center



6. Unfold step 5 on front flaps



7. Fold front flap over, squashing along previous crease.



8. Fold flap back over, reverse folding squashed edge down in the process.



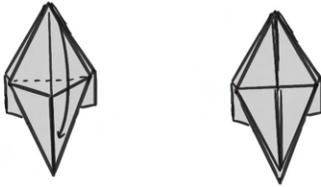
9. Repeat on other front flap



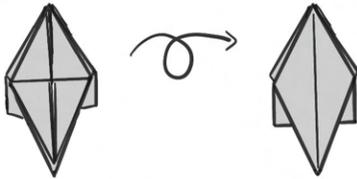
10. Flip over.



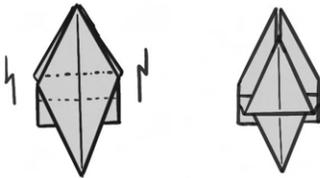
11. Valley fold flap down.



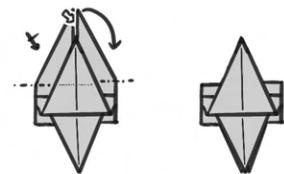
12. Flip over



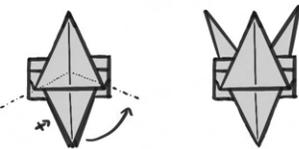
13. Pleat front flap (no reference).



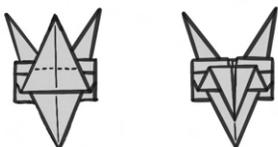
14. Reverse fold large flaps down.



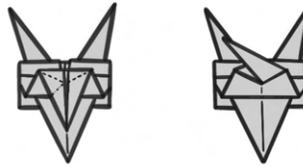
15. Reverse fold flaps back out



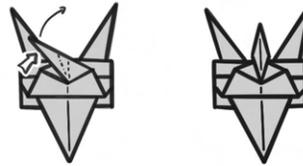
16. Fold front flap down.



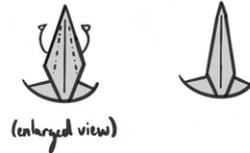
17. Rabbit ear the front flap.



18. Squash the flap.



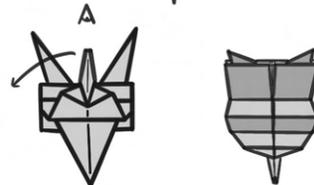
19. Fold edges of horn back.



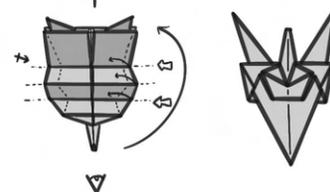
20. Fold tip of horn back.



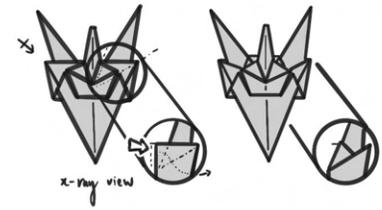
21. Pull out front flap.



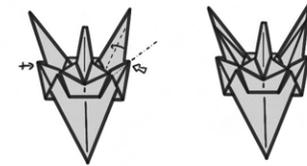
22. Fold along indicated creases. This is like folding 2 reverse folds that overlap.



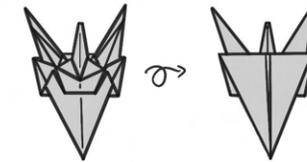
23. Reverse fold the layer behind the top layer, in front of the horns, along their inner edges.



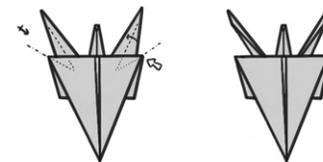
24. Reverse fold bottom edges of horns up.



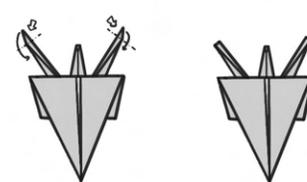
25. Flip over.



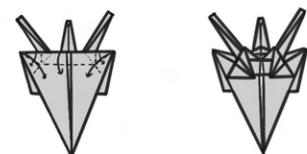
26. Repeat step 24 on backs of horns.



27. Reverse fold in tip of horns.



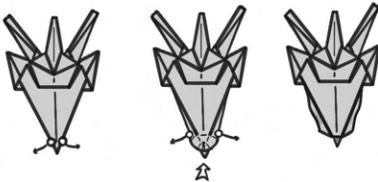
28. Fold down center edge while rabbit ear-ing the corners.



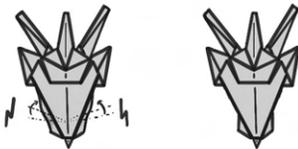
29. Flip over.



30. Hold middle flaps of top jaw and pull apart until tip sinks in.



31. Crimp edges of snout underneath top of jaw so snout lies flat.



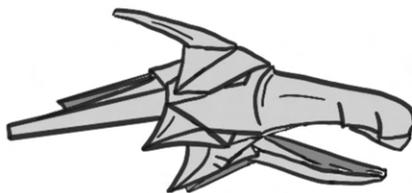
32. Pleat to form eyes.



33. Shape.



Finished!

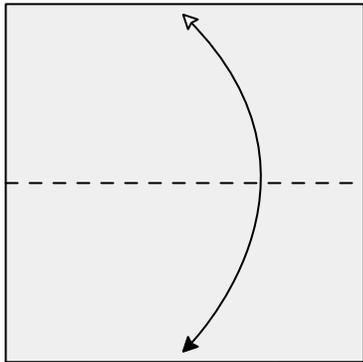
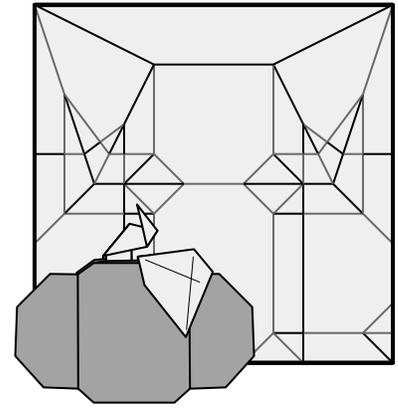


# Pumpkin

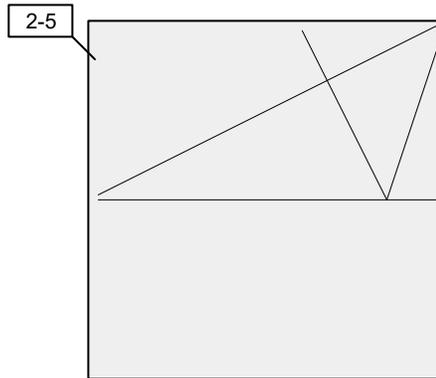
Model and diagrams by Albert Tran

Recommended Size: 15 cm.

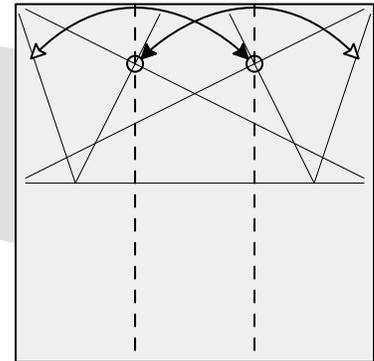
This model was inspired by a simple modular pumpkin. I challenged myself to recreate it using a single sheet. Designed in 2022.



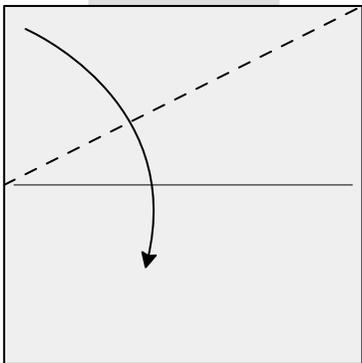
1. Fold in half and unfold.



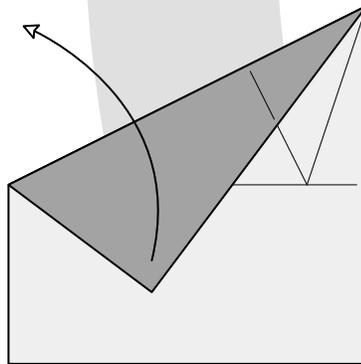
6. Repeat steps 2-5 on the other side.



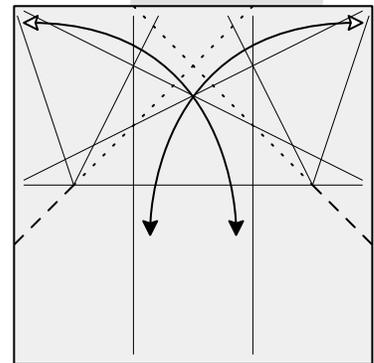
7. Bring the edges to the circled points and unfold.



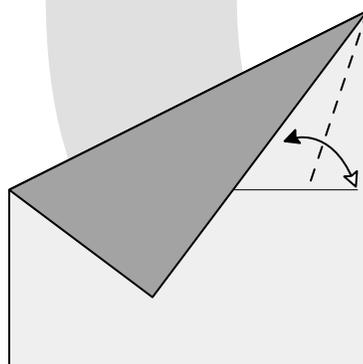
2. Fold between the corner and the crease.



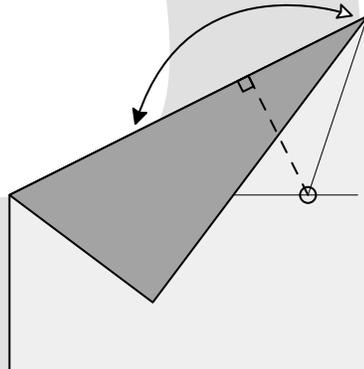
5. Unfold.



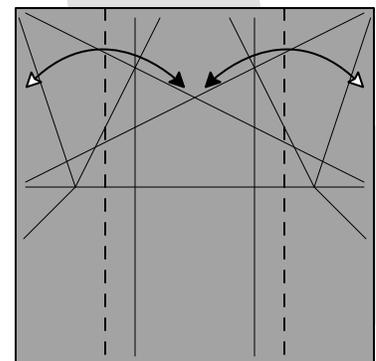
8. Bring the edge to the crease and unfold. Crease only where indicated. Flip over.



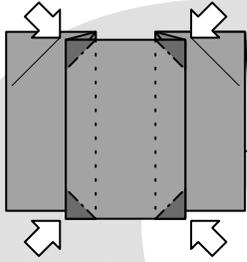
3. Fold edge to edge and unfold.



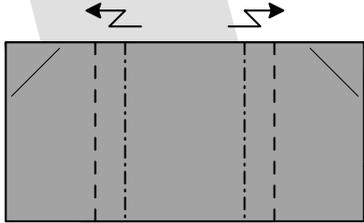
4. Starting at the circled point, fold along the edge and unfold.



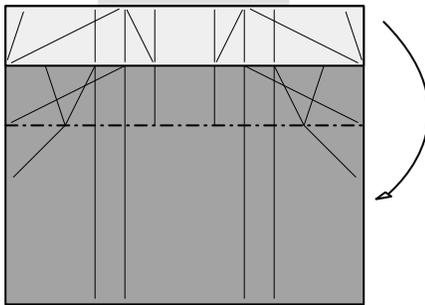
9. Bring the edges to the center and unfold.



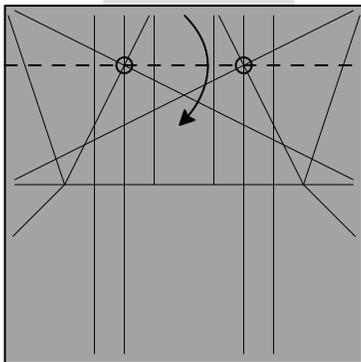
14. Reverse-fold four corners. The edges should line up with the edges below.



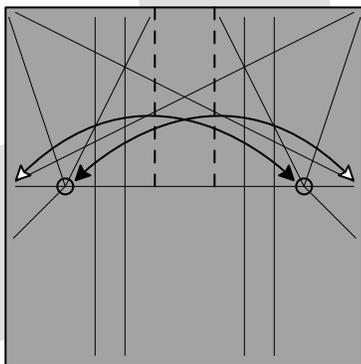
13. Pleat using the existing creases.



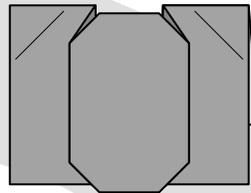
12. Fold the top edge behind.



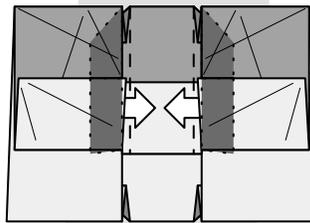
11. Fold the top edge down between the circled points.



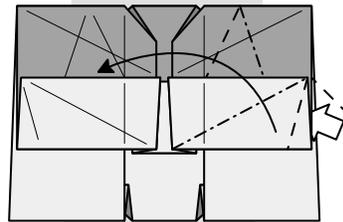
10. Bring the edges to the circled points and unfold.



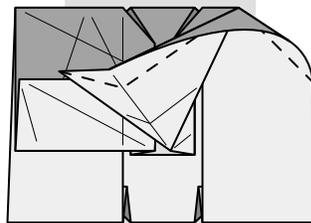
15. Flip over and zoom in.



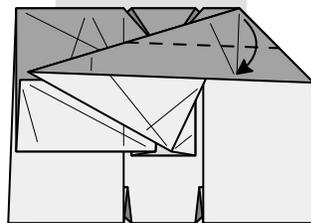
16. Pull out the hidden layers.



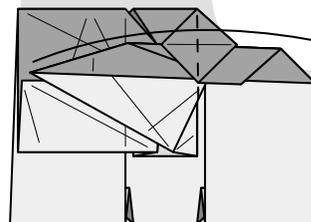
17. Swivel using the existing creases.



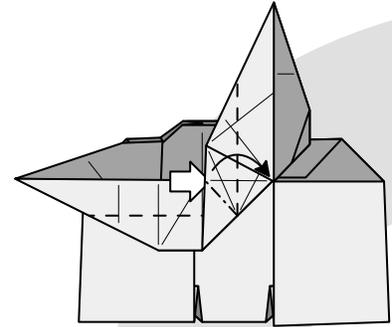
18. In progress.



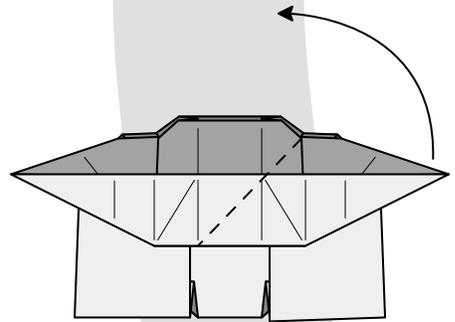
19. Fold the top layer down.



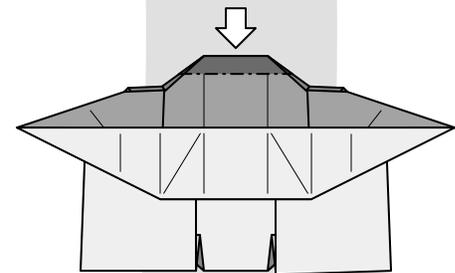
20. Fold the flap back to the right.



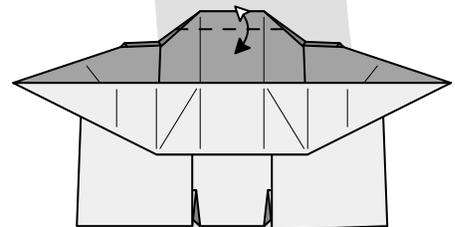
25. Bring an edge to the other edge and swivel the layers.



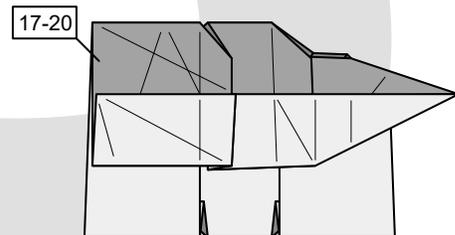
24. Fold a corner up- this will be the stem. If you want the stem to be on the other side, mirror every step from here onwards.



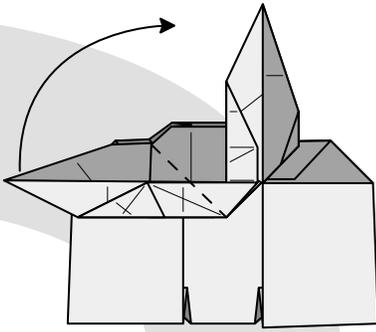
23. Open-sink the top.



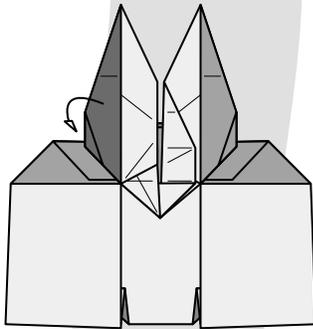
22. Fold and unfold the top.



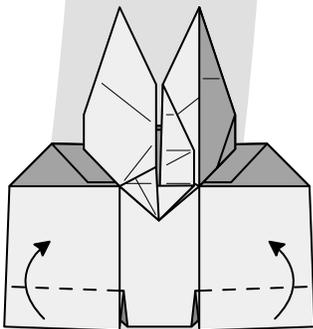
21. Repeat steps 17-20 on the other side.



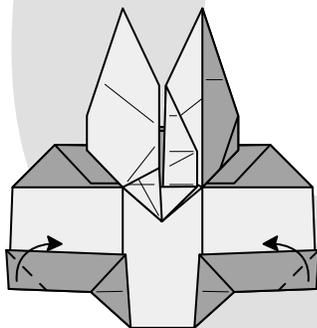
26. Fold another flap up.



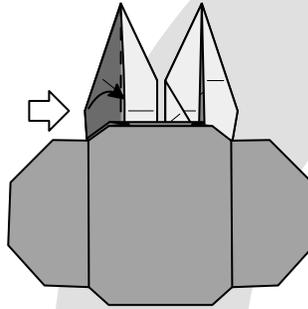
27. Wrap the shaded layers behind.



28. Fold the bottom edges up.



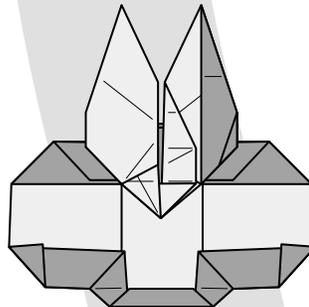
29. Fold the bottom corners up.



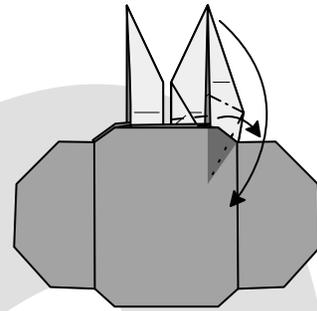
32. Reverse-fold inside the pocket.



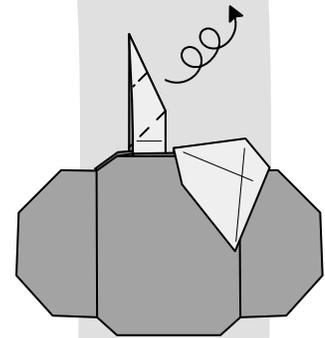
31. Flip over.



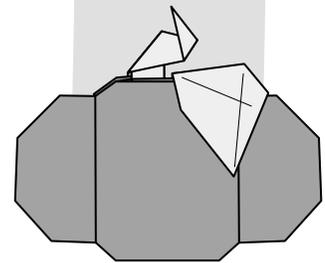
30. Fold the bottom edge up.



33. Fold down the other flap while opening a layer.



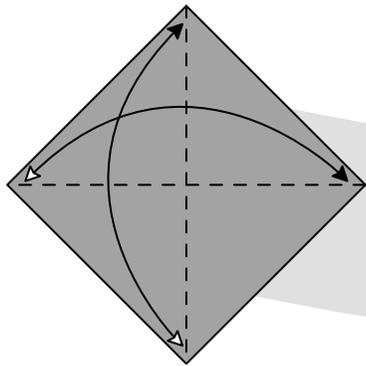
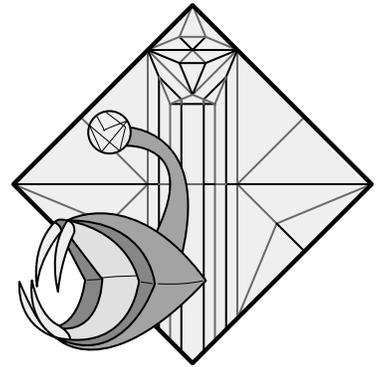
34. Curl the stem.



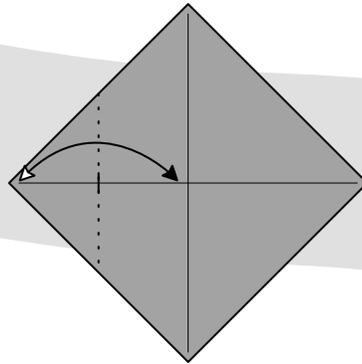
35. The completed Pumpkin.

# Anglerfish

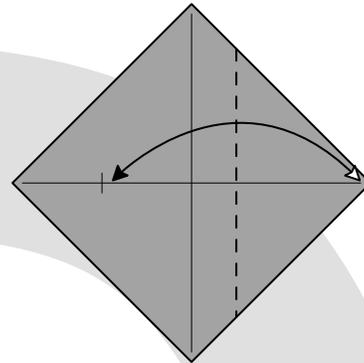
Model by Theo Lysek, Diagrams by Albert Tran  
Recommended size: 20 cm.



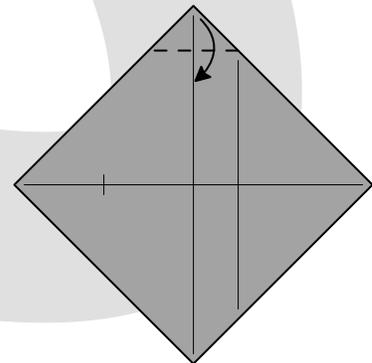
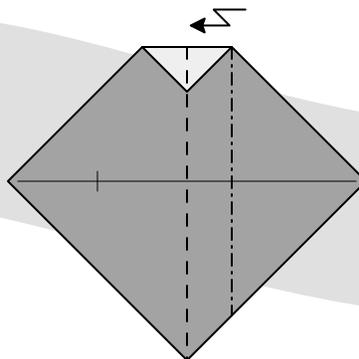
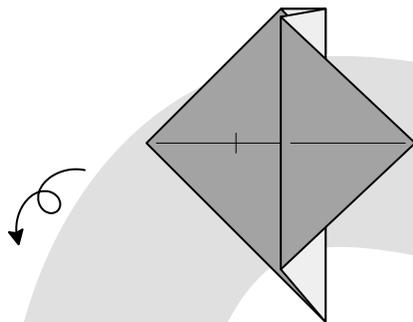
1. Fold the diagonals and unfold.



2. Bring the corner to the center and pinch.



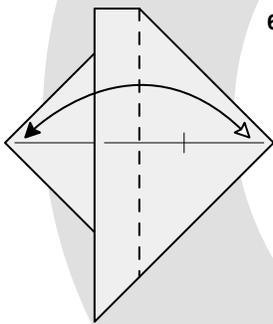
3. Bring the corner to the mark and unfold.



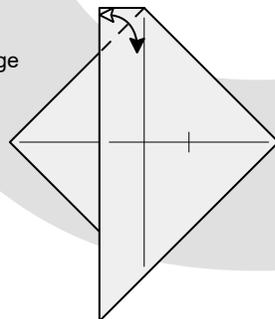
6. Flip over.

5. Pleat using the existing creases.

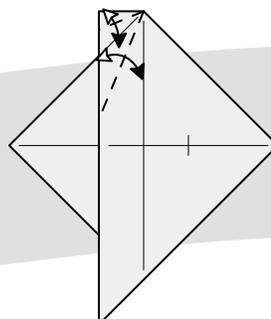
4. Fold the corner down along the centerline.



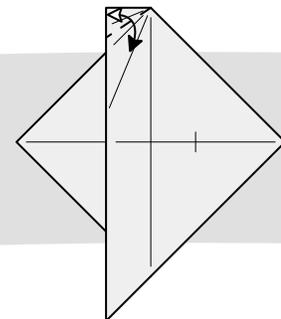
7. Fold along the edge and unfold.



8. Bring the edge to the crease and unfold.



9. Fold angle bisectors and unfold.



10. Fold an angle bisector and unfold.

21. Fold in halves and unfold.

22. Collapse using the existing creases.

23. Turn over and zoom in.

24. Fold the tip up.

25. Reverse-fold on both sides.

26. Fold along the edge below.

27. Fold along the edge below.

28. Fold the corner to the other corner.

11. Crimp the corner using the existing creases.

12. Bring the edge to the crease and unfold.

13. Spread-squash the edge.

14. Bring the edges to the center and unfold.

15. Sink the edges.

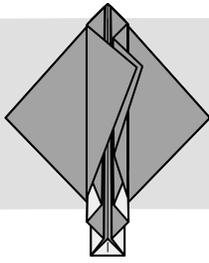
16. Focus on the top corners.

17. Crimp using the existing creases.

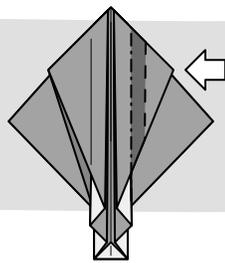
18. Reverse-fold the remaining layer.

19. Fold over and spread-sink two corners.

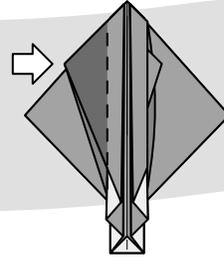
20. Return to full view.



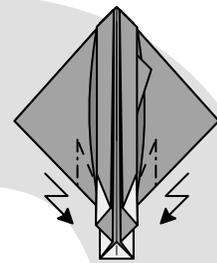
29. Unfold to step 26.



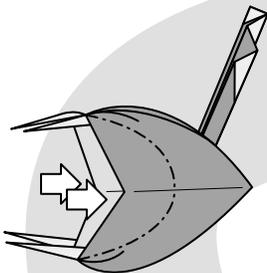
30. Sink in and out.



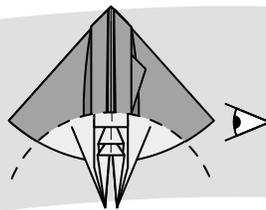
31. Sink the other corner so that the corner goes in the pocket.



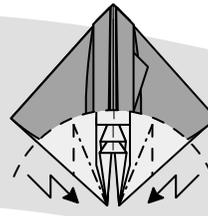
32. Pleat the bottom corners on both sides. The model will no longer lie flat.



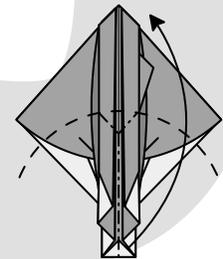
35. Push the sides of the jaw in.



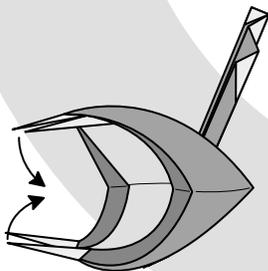
34. The next step will be a side view.



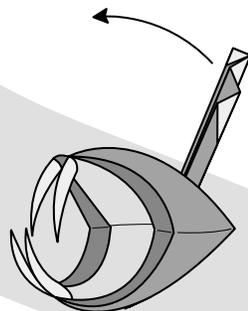
33. Pleat the bottom corners on both sides.



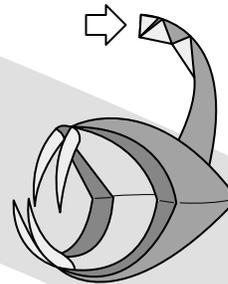
32. Pull up the long flap. The next step will be an x-ray view.



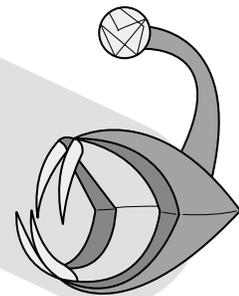
36. Bend the teeth down.



37. Curl the stalk.



38. Crumple the tip to form the bulb.

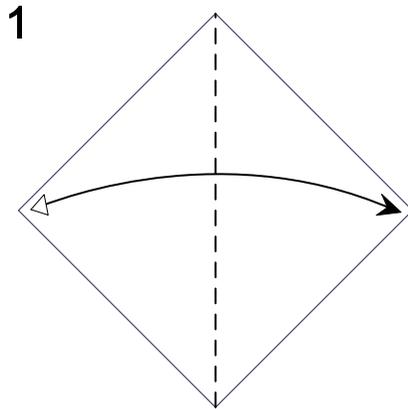
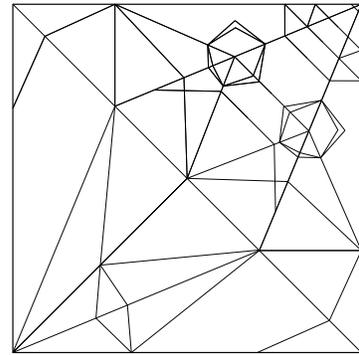


39. The completed Anglerfish.

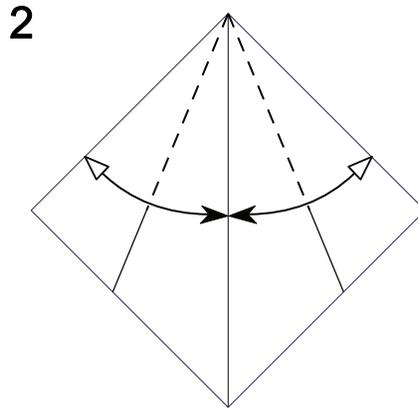
# Cat Hat

Designed 2021 by  
Bernie Peyton

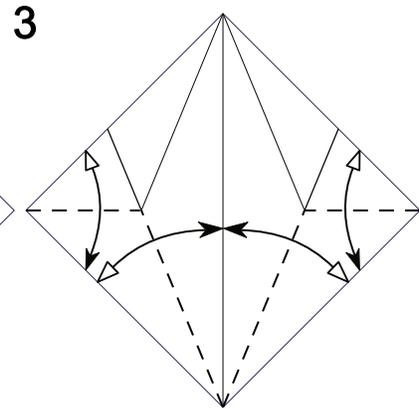
Width of square =  
1.2 or 1.4 x head  
circ.



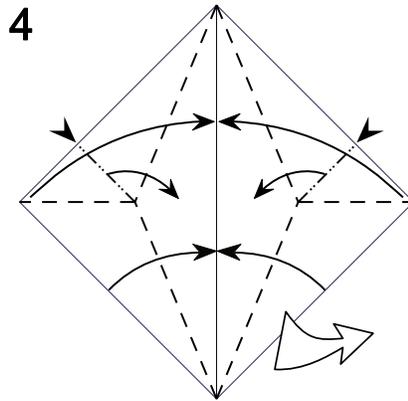
Crease diagonal.



Fold and unfold  
angle bisectors.

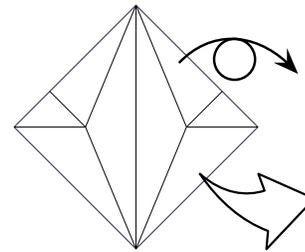
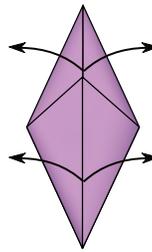


Fold and unfold  
angle bisectors.



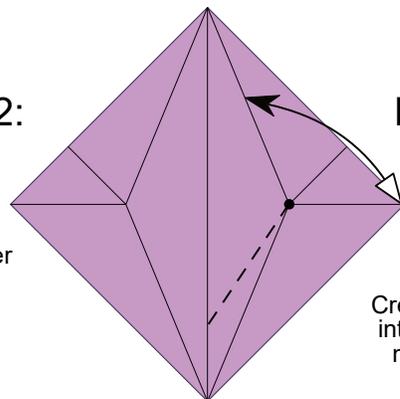
Add extra creases and collapse  
to make a "fish" base.

**Use these steps to define a fold in step 34  
or see the last step.**



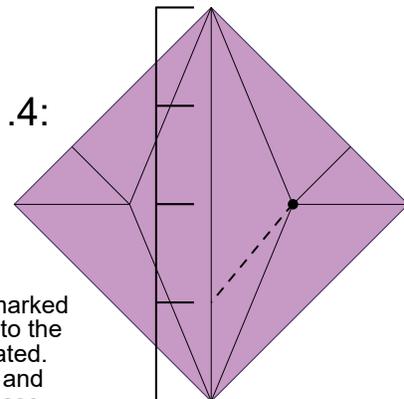
Unfold the fish base  
and turn the paper over.

For ratio 1.2:

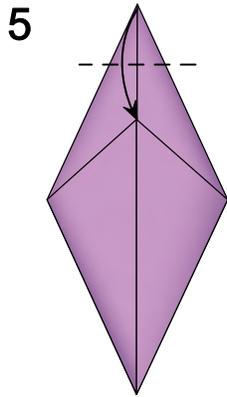


Placing the right corner  
on a crease of step 2  
and crease from the  
marked intersection  
(dot) to the midline.  
Then turn over and  
refold the fish base.

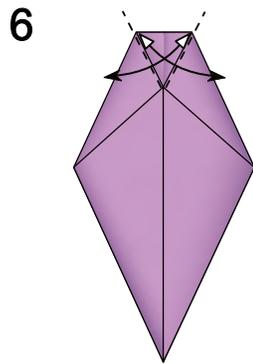
For ratio 1.4:  
longer  
tail



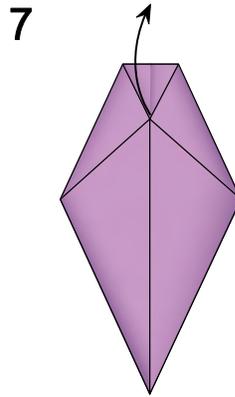
Crease from the marked  
intersection (dot) to the  
midline as indicated.  
Then turn over and  
refold the fish base.



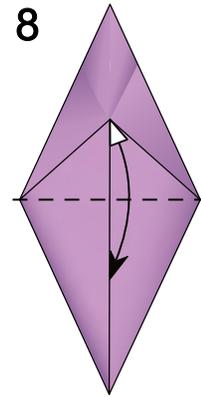
Valley-fold.



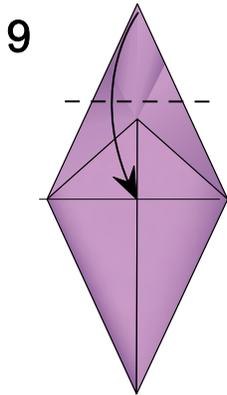
Valley-crease through all layers along the edge of the folded corner.



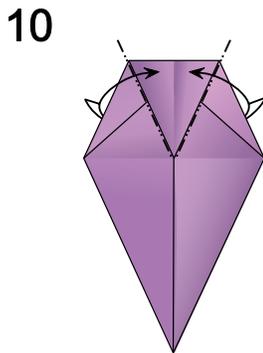
Unfold.



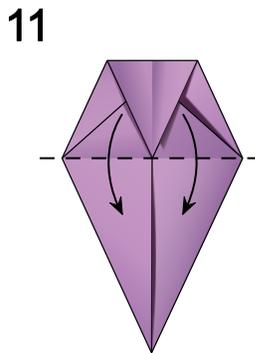
Fold and unfold flaps.



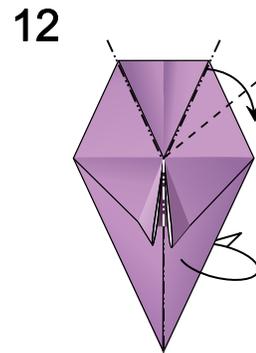
Valley-fold.



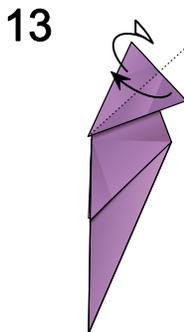
Mountain-crease through all layers.



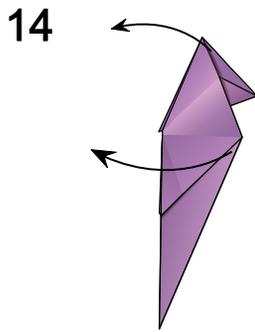
Pull out flaps. Valley-fold them down.



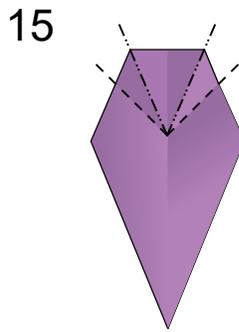
Mountain-fold along the diagonal and pleat the top of the hat.



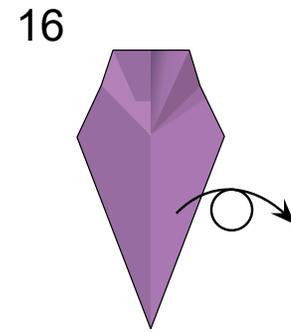
Rotate the cat's head about its hinge.



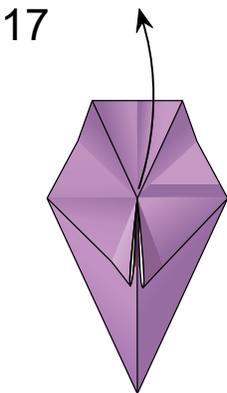
Unfold so that the reverse side of the model is in view.



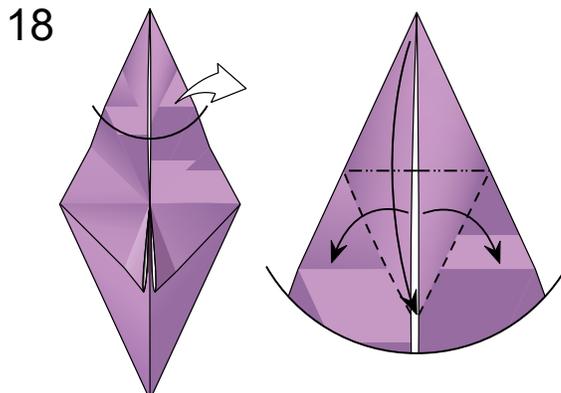
Change direction of these creases.



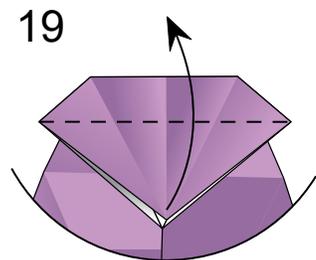
Turn over.



Unfold.

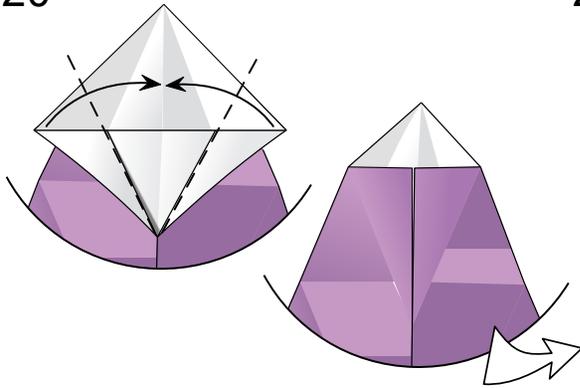


Spread sides of the top flap on the creases of step 6 and fold down the top corner.



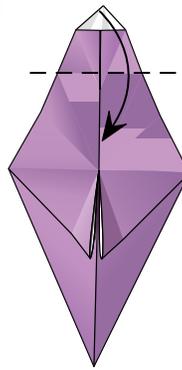
Valley-fold.

20



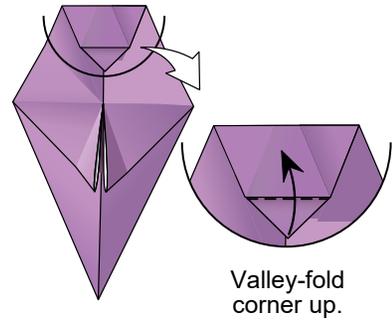
Valley-fold.

21



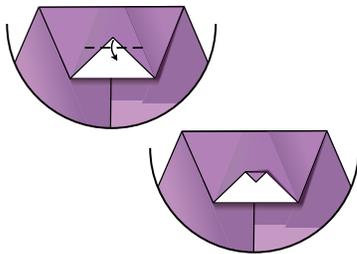
Valley-fold cat head on the crease of step 9.

22



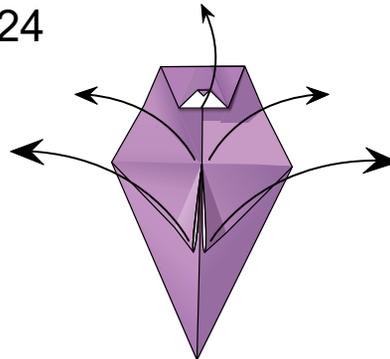
Valley-fold corner up.

23



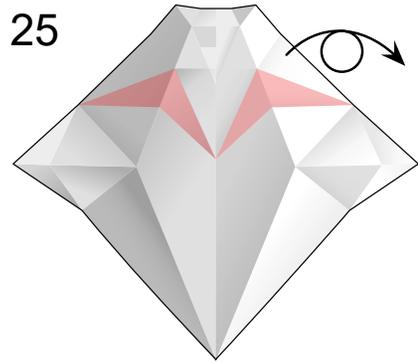
Valley-fold a nose.

24



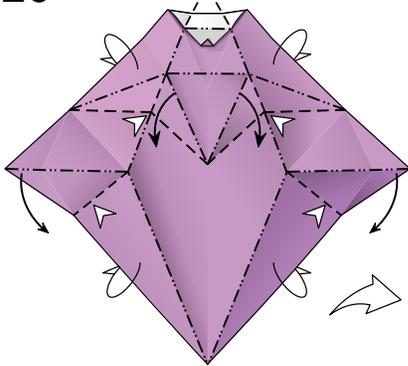
Open the model to crimp the shoulders.

25



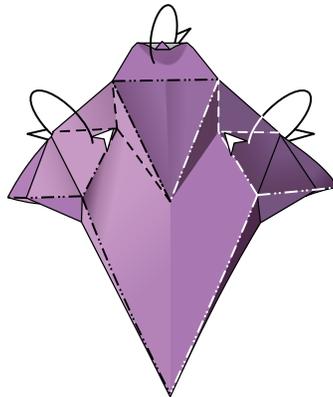
Orange marks the site of crimps in the next step. Turn over.

26



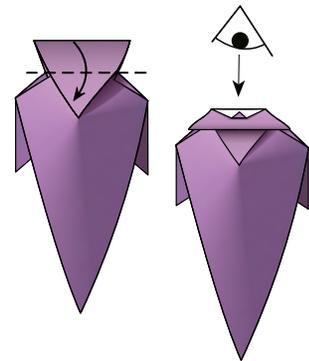
Collapse using existing creases.

27



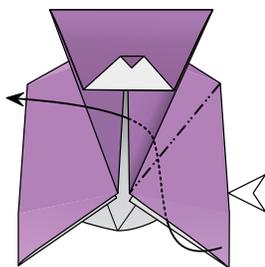
In progress. The hat becomes convex while crimping.

27



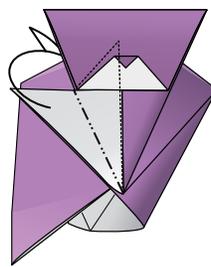
Pinch all layers of the head together above the valley crease and fold the head towards you.

28



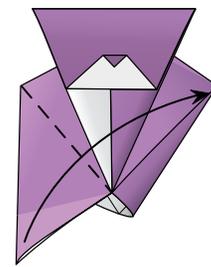
Inside reverse-fold flap. Put it through the gap between the flaps.

29



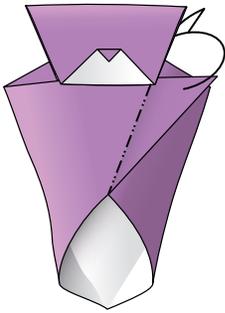
Mountain-fold flap end on the crease of step 10 around the edge under it (note its position at the dotted line).

30



Valley-fold.

31



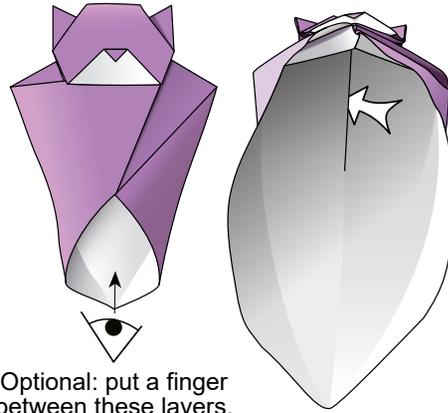
Repeat step 29 on the other flap.

32

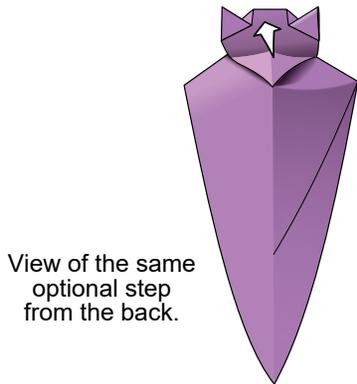


Pleat ears.

33

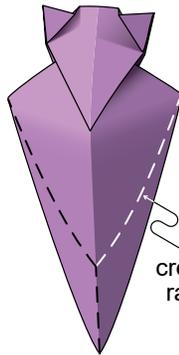


Optional: put a finger between these layers, and push up the back of the head.



View of the same optional step from the back.

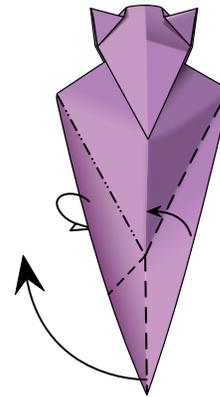
34



crease for ratio 1.4

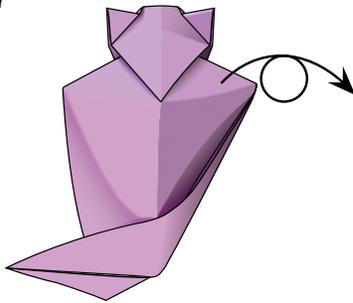
Inside reverse-fold tail.

35



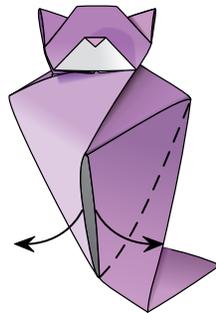
Swivel-fold the cat's tail to the left.

37



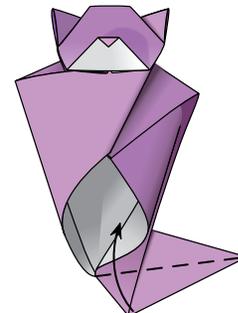
Turn over.

38



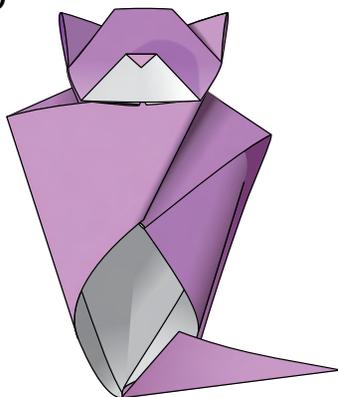
Open raw edges. The valley fold reverses a crease in step 34.

39



Valley-fold the bottom half of the tail and push it inside the cavity.

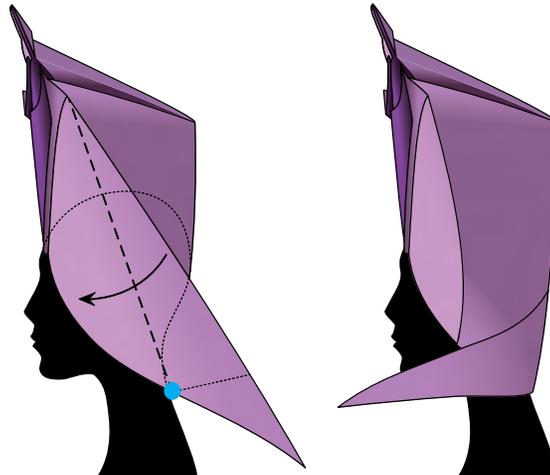
40



Finished Cat Hat.

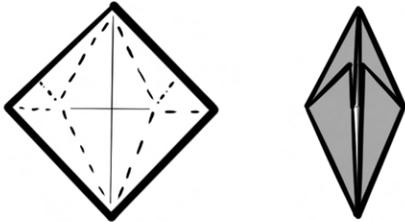
The intersection of valley folds in step 34 (blue dot) can be found by putting on the hat and molding it to your head.

Then repeat steps 35 to 39 with the hat off the head.

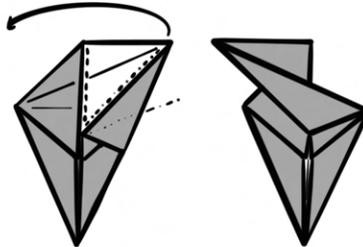


Rhino by Abhik Ahuja, based on Oliver Jiang's Elephant.

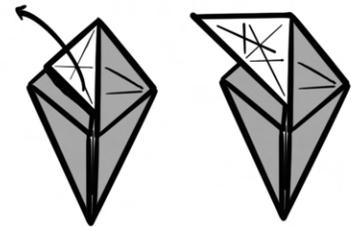
1. Fold a fish base



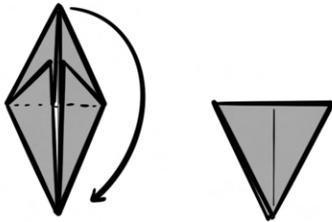
5. Swivel Fold.



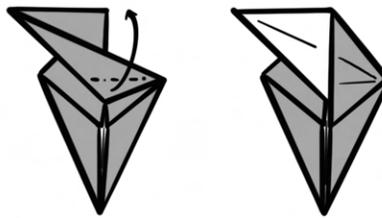
9. Unfold.



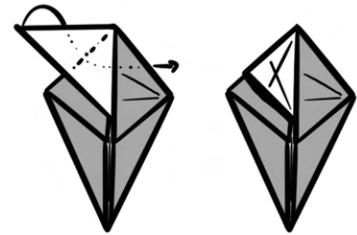
2. Fold in half.



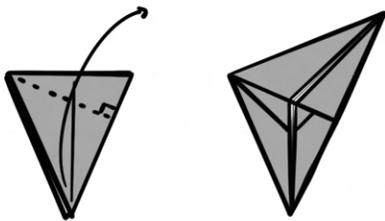
6. Pull out top layer.



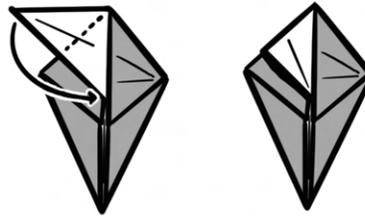
10. Reverse fold.



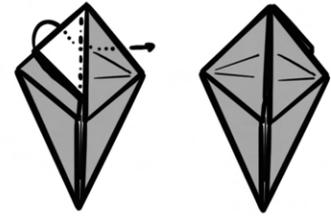
3. Fold top flap to right, starting at corner and lining up edge.



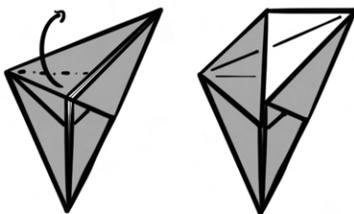
7. Fold tip down.



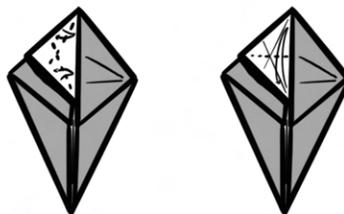
11. Reverse fold.



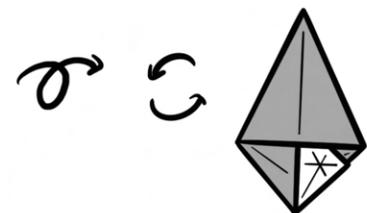
4. Pull out top layer.



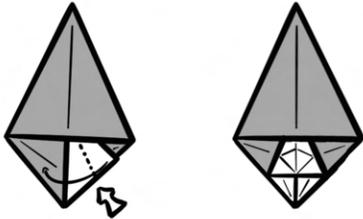
8. Precrease angle bisectors.



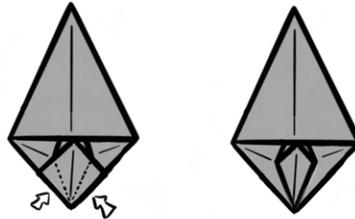
12. Flip over and rotate.



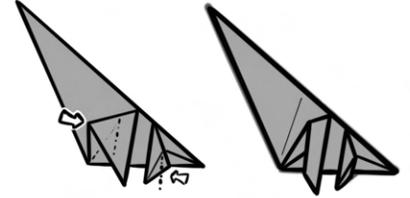
13. Squash small flap.



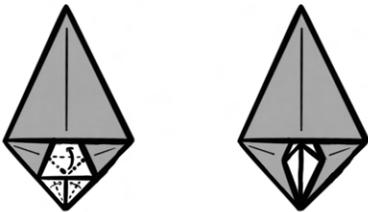
17. Reverse fold.



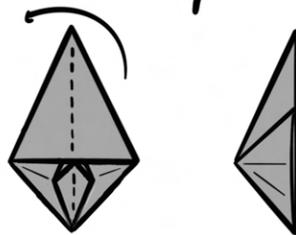
21. Reverse fold to thin flaps.



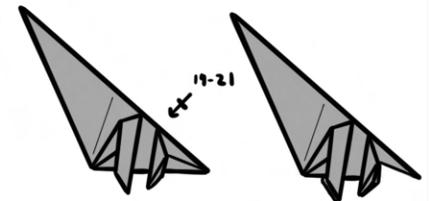
14. Petal fold.



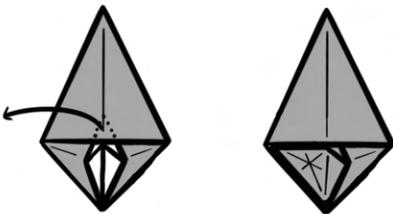
18. Fold in half.



22. Repeat steps 19-21 on other side.



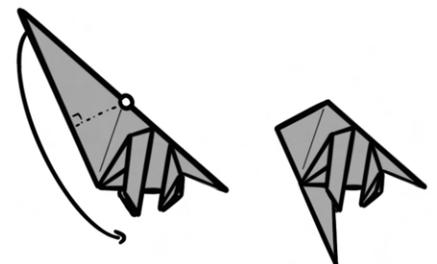
15. Unwrap layer from under flap.



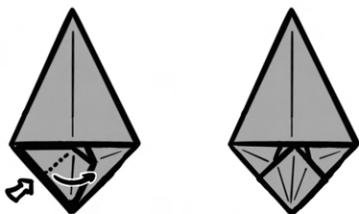
19. Rotate and free trapped paper.



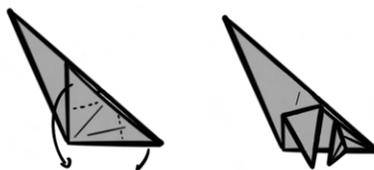
23. Reverse fold.



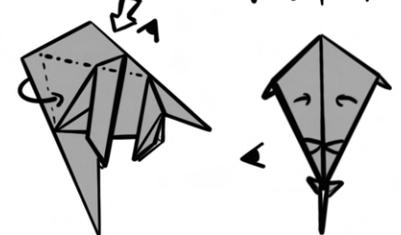
16. Squash fold unwrapped flap



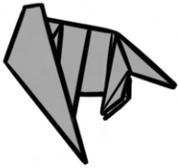
20. Valley fold.



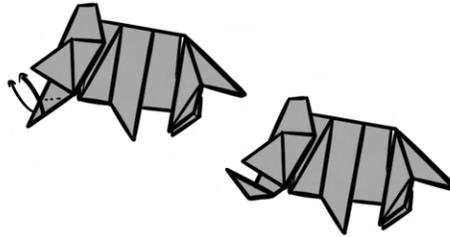
24. Sink top region, while outside reverse folding front flap.



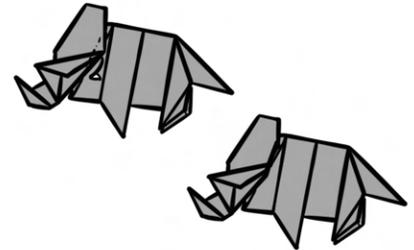
25. Finished step 24.



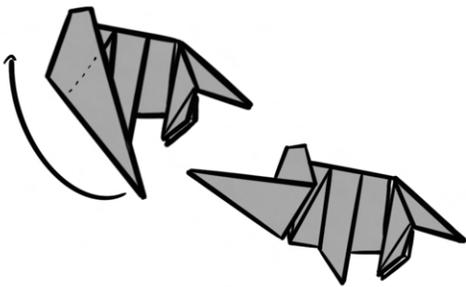
29. Outside reverse fold.



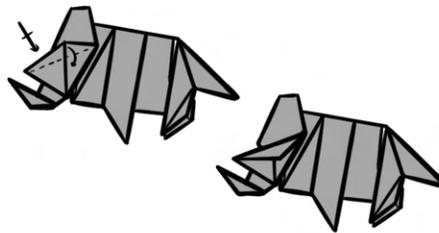
33. Mountain fold.



26. Outside reverse fold.



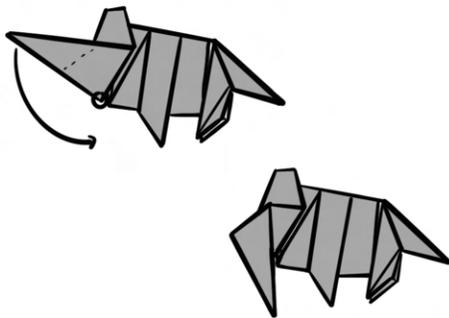
30. Valley fold. Repeat behind.



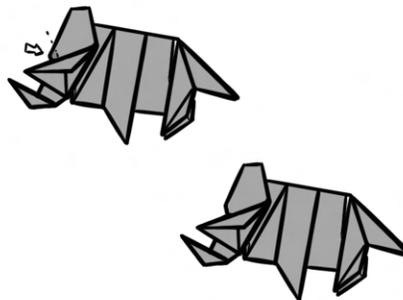
34. Fold ear forwards, squashing flat if necessary.



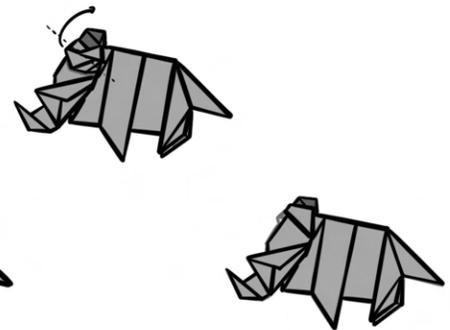
27. Outside reverse fold, ensuring edge touches marked point.



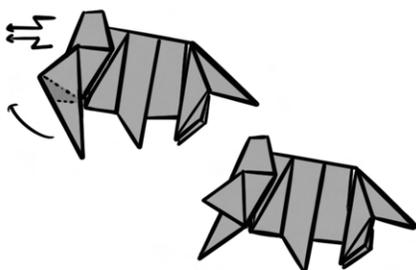
31. Reverse fold / Sink.



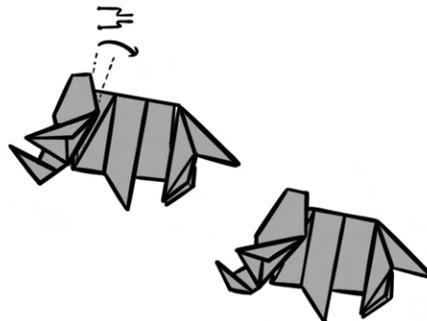
35. Fold ear back.



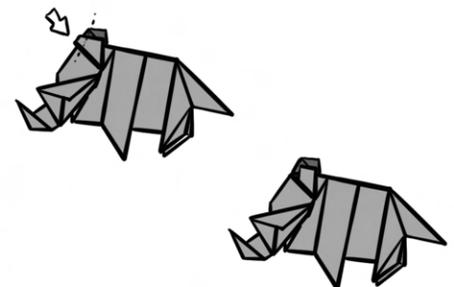
28. Crimp inside.



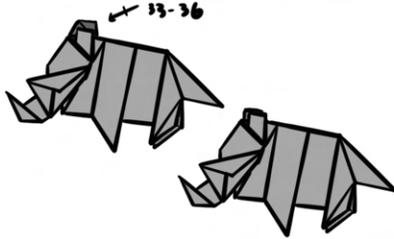
32. Crimp neck behind head.



36. Reverse fold ear.



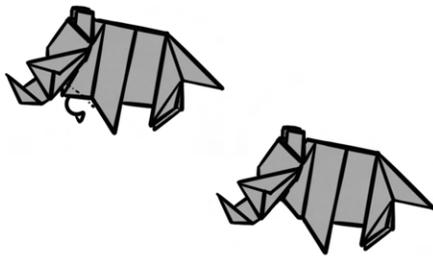
37. Repeat steps 33-36 on back.



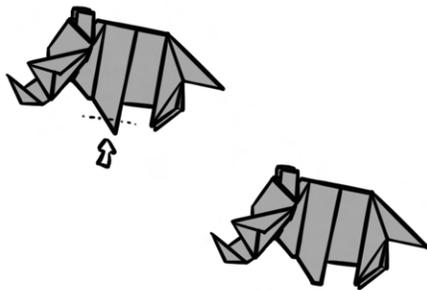
41. Done!



38. Mountain fold front of body.

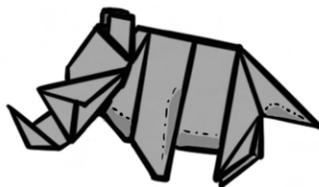


39. Reverse fold front legs.



Alternative version: For step 20, fold front legs back all the way then forwards, and shape accordingly.

40. Shape.





1. Follow steps 1-23 of Abhik's Rhino. You should have something like this.

Precrease along the line. The line starts from the hind leg (on the right) and extends to the midpoint of the top left edge.



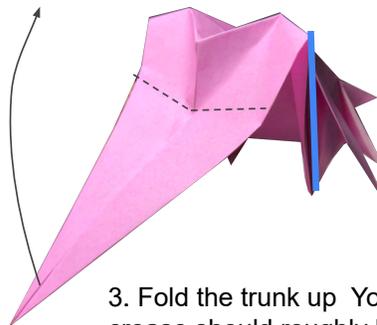
2. Begin sinking along the precrease, but don't sink it all the way. From here on out, the model will no longer be flat.



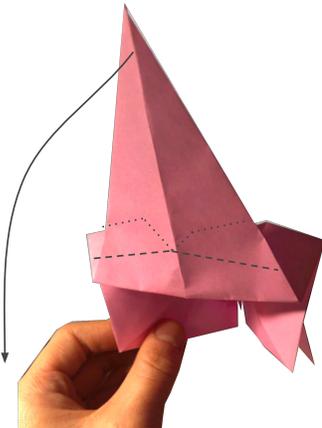
2a. A view from the top. You want to make mountain folds along the highlighted quadrilateral.



2b. The result of the partial sink. The corner circled in blue will become the trunk; the corner circled in brown will become an ear; the corner circled in orange will become a tusk.



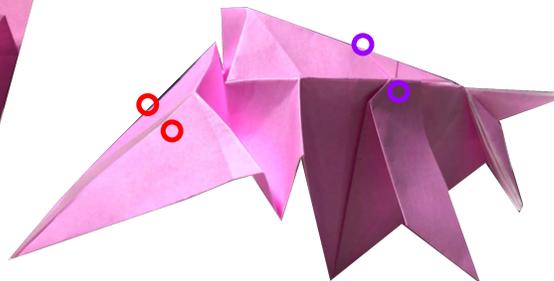
3. Fold the trunk up. Your crease should roughly line up with the midpoint of the edge next to the blue line.



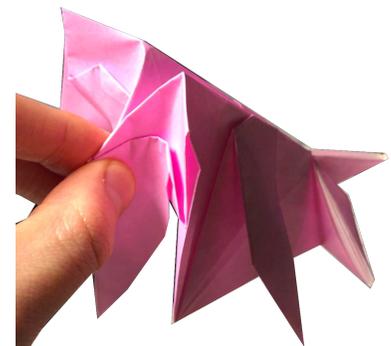
4. The result. Fold the trunk back down, making sure that your crease rests against the point of the layer behind it.



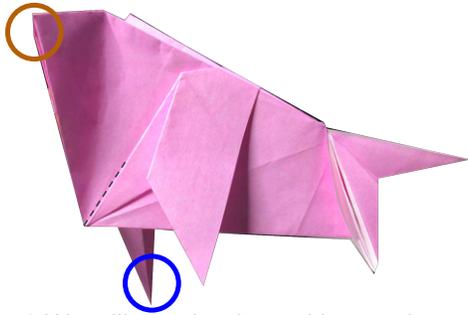
5. We see the beginnings of an elephant's face.



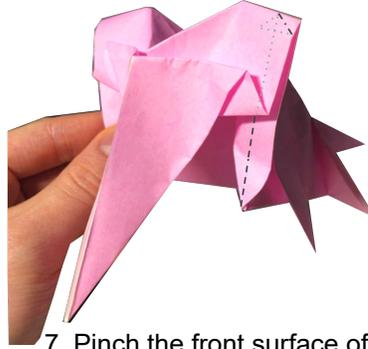
5a. With one hand, pinch at the red circles. With the other hand, pinch at the purple circles. This will close the model up a little, but not completely, as the ears will still hang loose.



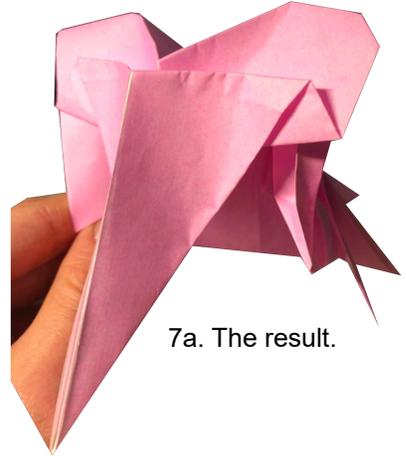
5b. The result.



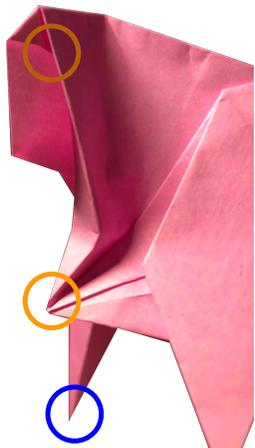
6. We will now begin working on the tusks. First, pinch the tusk along the edge. (For clarity, the blue circle is the trunk and the brown corner is the ear)



7. Pinch the front surface of the tusk in half, then continue the crease up and parallel to the right edge. When you hit the top edge, do a swivel fold.



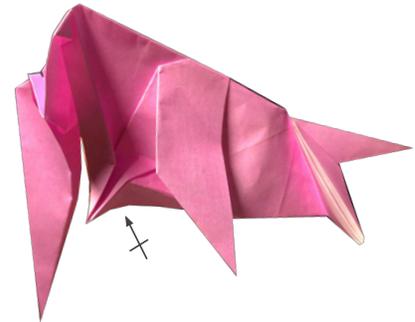
7a. The result.



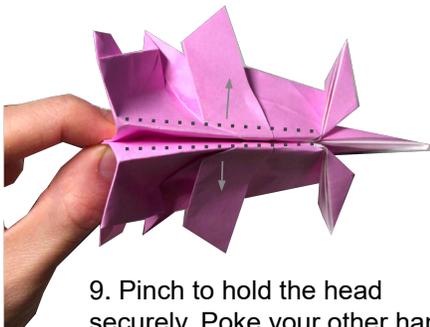
7b. The result, viewed from the back. Circles are added for clarity: blue=trunk, brown=ear, orange=tusk



8. Now, let's thin the bottom half of the tusk. Pinch up to the bend in the top half. Then, form a crease that hits the bottom edge. You can think of this entire maneuver as a partial reverse fold.



8a. The result. Repeat steps 6-8 on the other tusk.



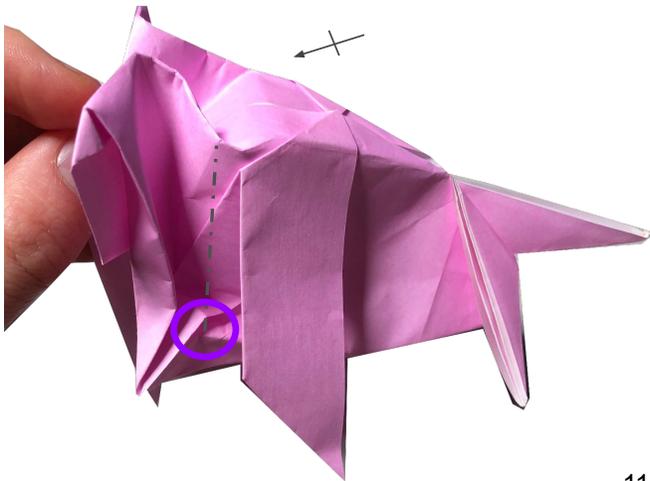
9. Pinch to hold the head securely. Poke your other hand underneath to "push" the marked underneath to spread apart the indicated layers.



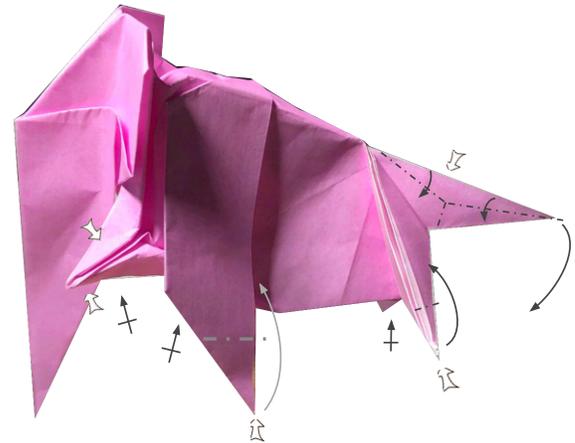
9a. In progress. Use your bottom hand to "push" the marked underneath to spread apart the indicated layers.



9b. The result.



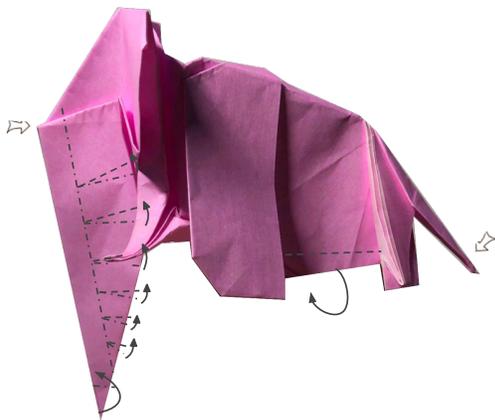
10. Mountain fold, starting from the circled point up to the top edge. This will lock the tusk to the body. Repeat on the back.



11. At this point, most of the difficult folds required to get the volume of the elephant are done. All that is left is to shape the details! We can start by blunting all of the legs by inside reverse folding them.

Double rabbit ear the tail to thin and bend it.

Curve the tusks. You can do this by rolling the tusks between your fingers, or you can roll them on some tool, like the tip of a pencil.



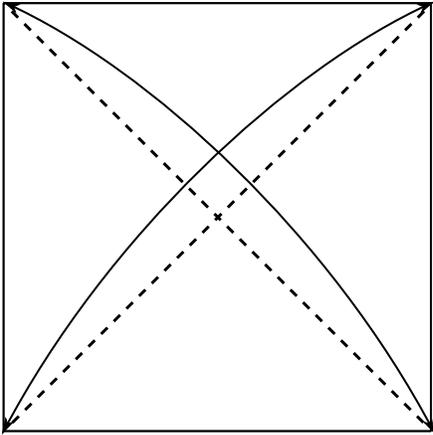
12. Now, we need to work on the tusk. I suggest inflating the tusk a little, and then pleat/crimping it. This gives the trunk volume and some curvature.

Thin the belly. Curl the tail. Again, you can curl the tail by rolling it between your fingers or with a tool.

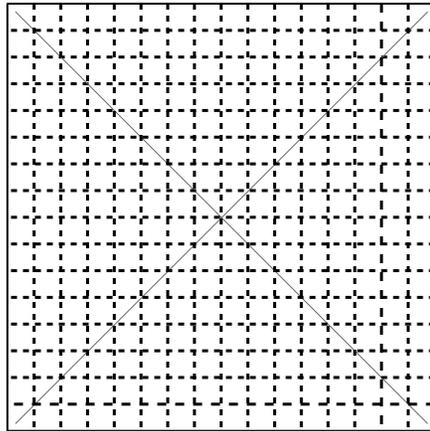


13. Finished elephant.

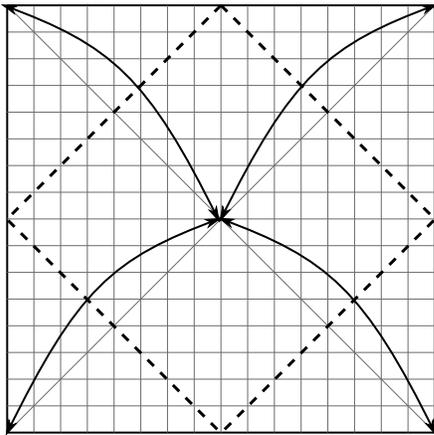




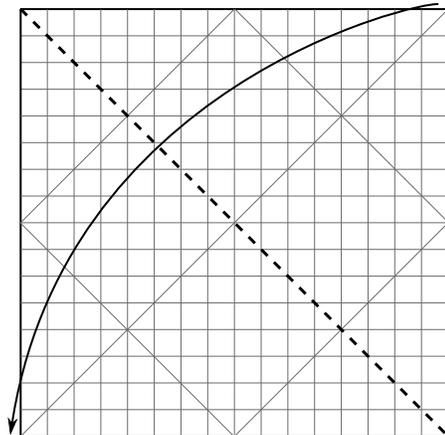
1. Begin with the white side up.  
Fold and unfold the diagonals.



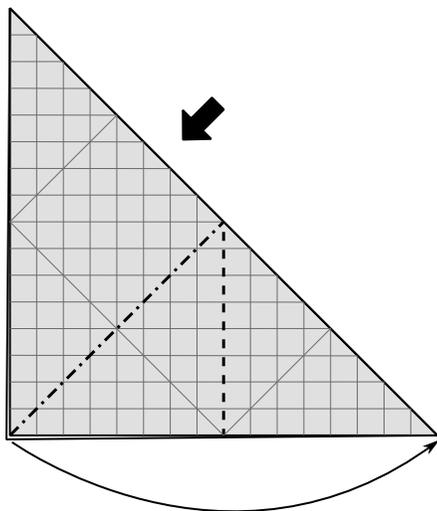
3. Fold and unfold a 16x16 grid.



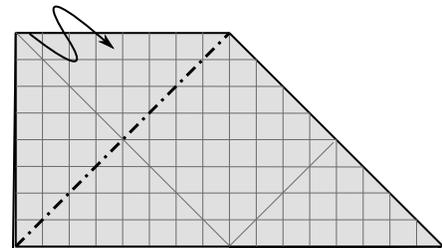
4. Fold and unfold all corners.



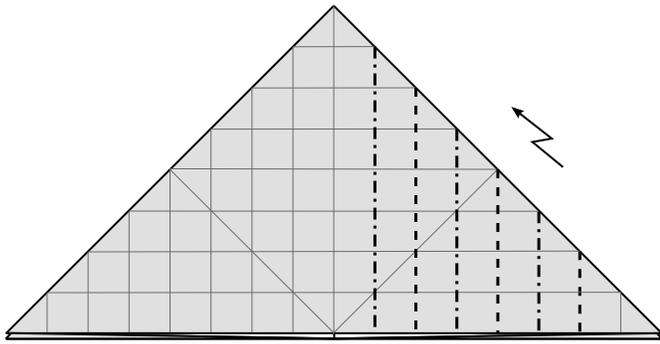
4. Fold the diagonal.



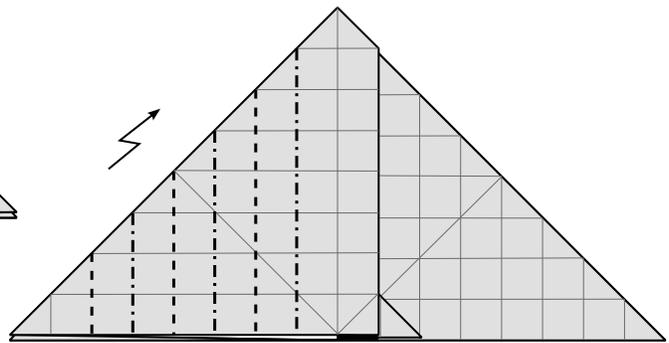
5. Swivel fold.



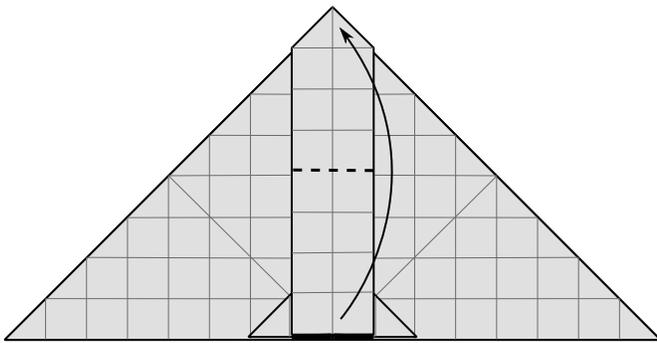
6. Inside reverse fold.



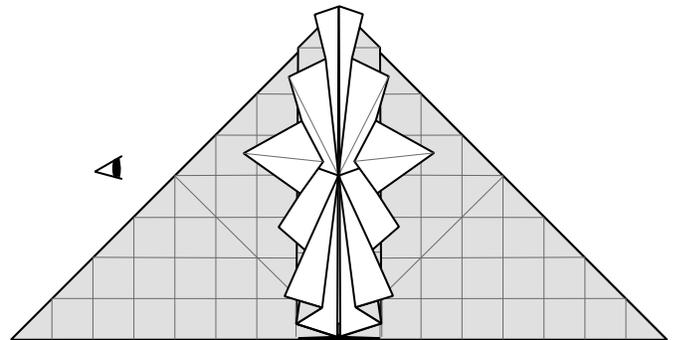
7. Collapse making three consecutive crimps.



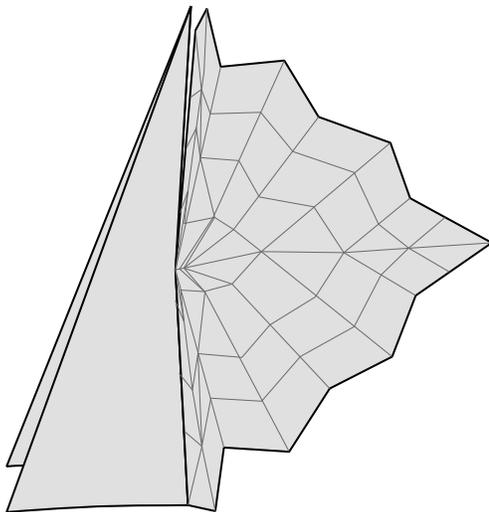
8. Make three consecutive crimps again.



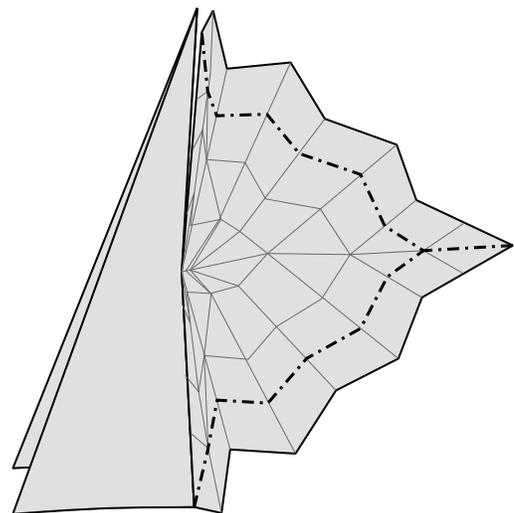
9. Fold only the outermost layer dragging the pleats that were made in the previous two steps. The model will not lay flat.



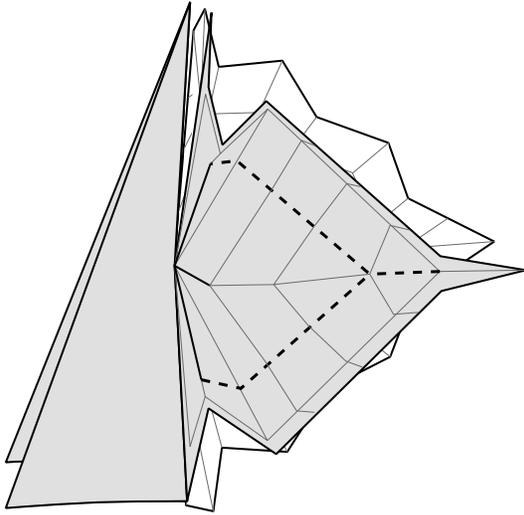
10. Rotate the model to see from the perspective of the eye.



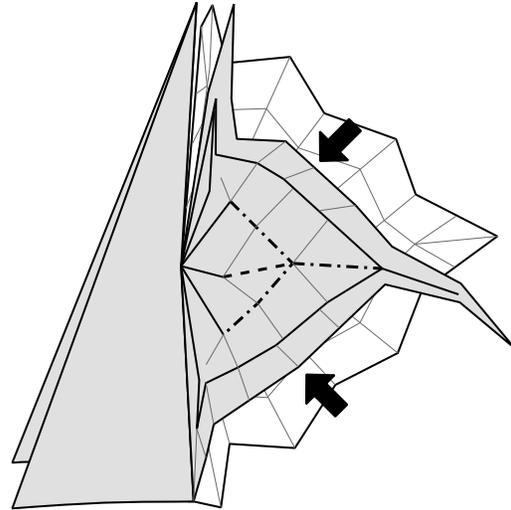
11. You should see the creases made in steps 3 and 4.



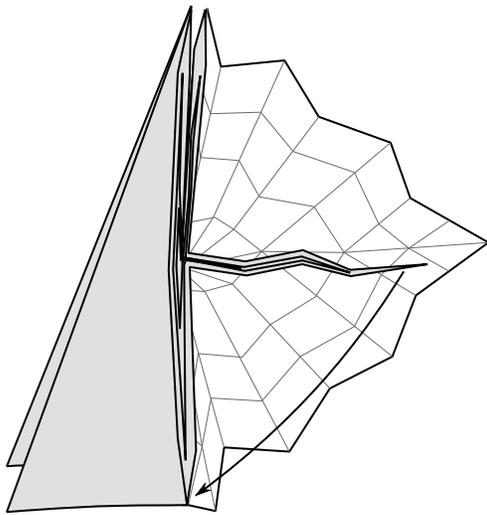
12. Collapse the first row with mountain folds.



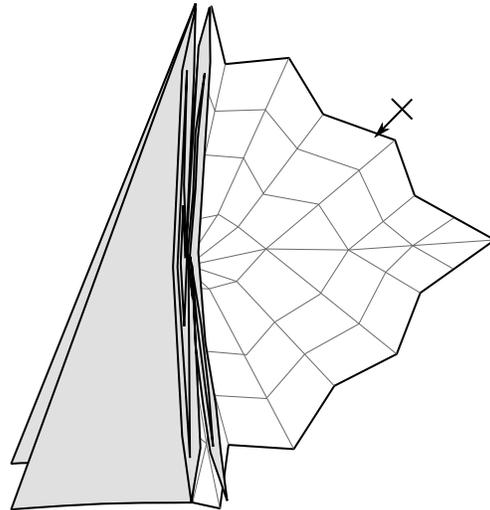
13. Collapse the second row with valley folds.



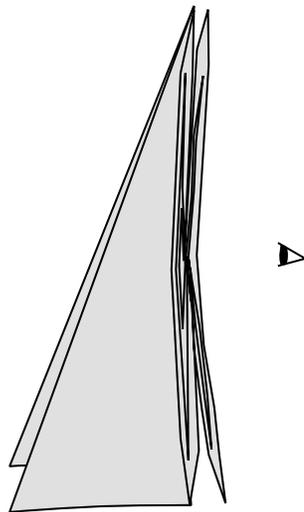
14. Collapse flattening the flap.



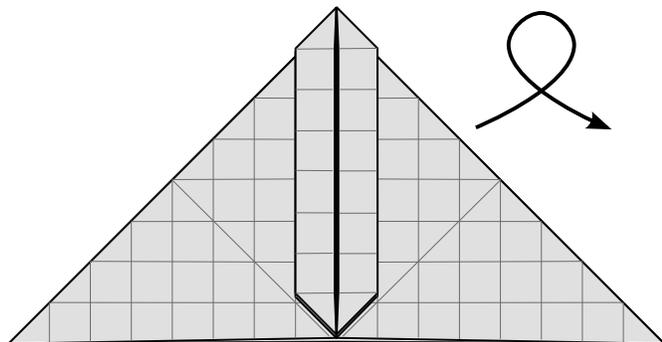
15. Fold the new flap down.



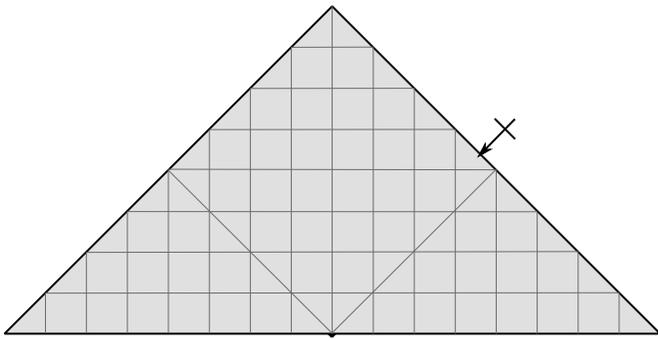
16. Repeat steps 11-15 behind.



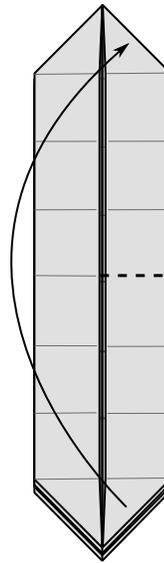
17. Go back to the original perspective.



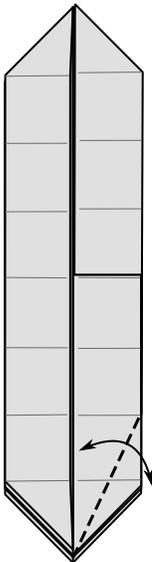
18. Turn around.



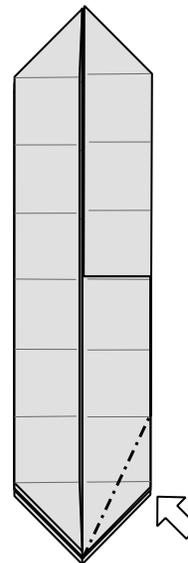
19. Repeat steps 7 to 17.



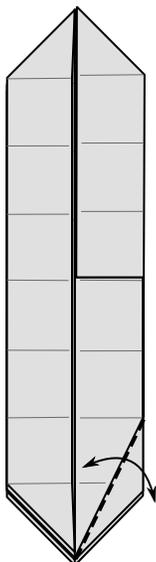
20. Fold one flap up.



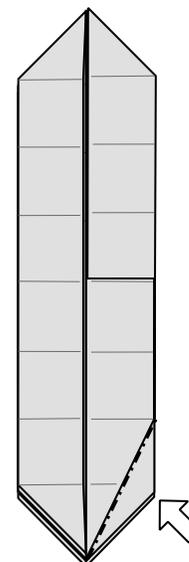
21. Fold and unfold.



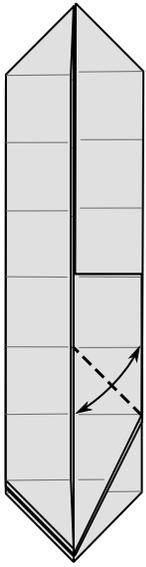
22. Open sink.



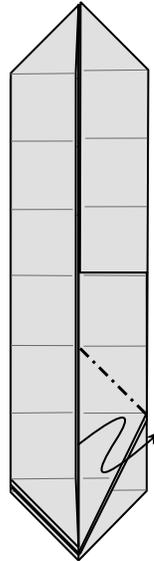
23. Fold and unfold along the edge.



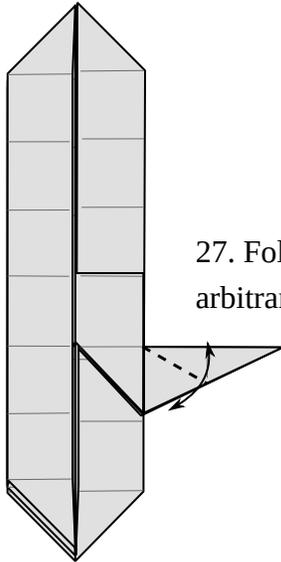
24. Open sink.



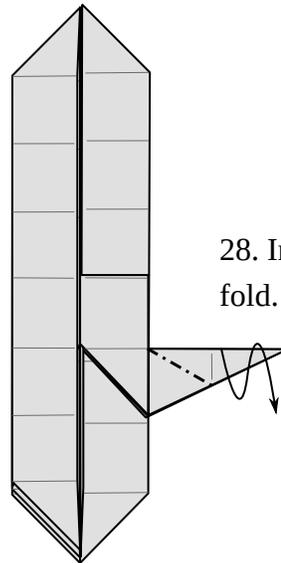
25. Fold and unfold.



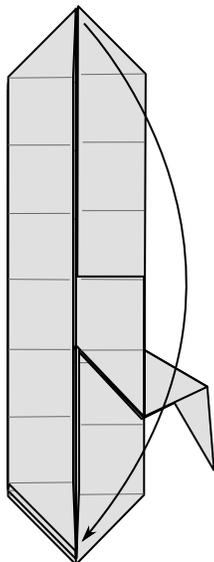
26. Inside reverse fold.



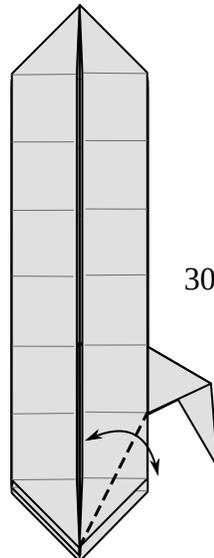
27. Fold and unfold on an arbitrary angle.



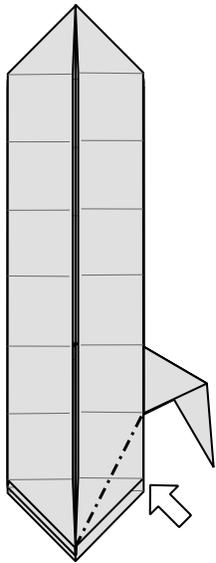
28. Inside reverse fold.



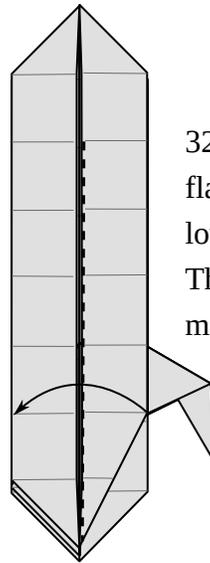
29. Fold down the flap lifted in step 20.



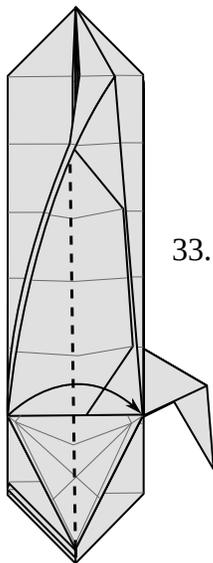
30. Fold and unfold.



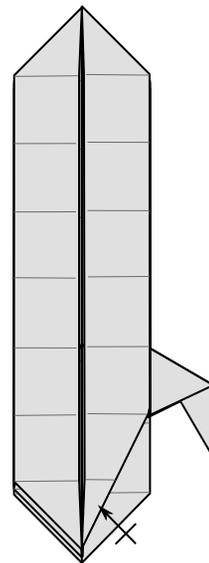
31. Open sink.



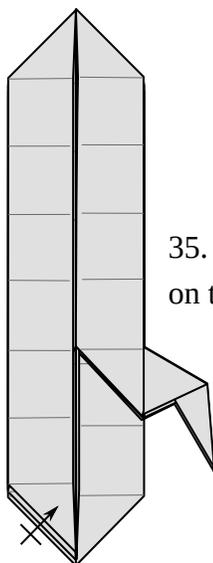
32. Open the topmost flap pulling until the lower corner stays flat. The top part of the model will not lay flat.



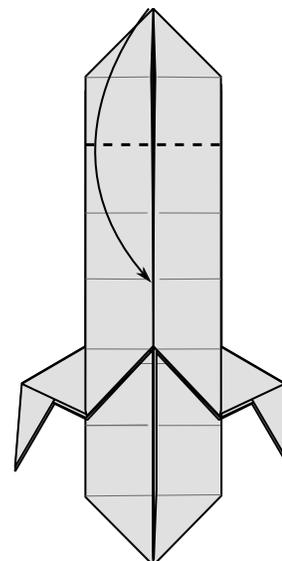
33. Like so. Close the flap.



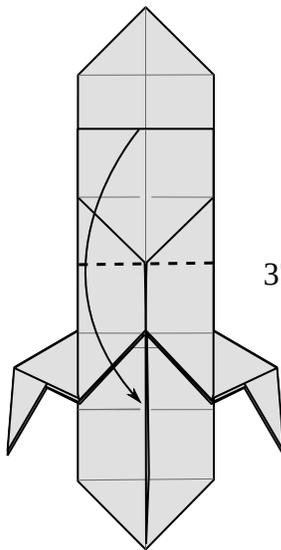
34. Repeat steps 25 to 28.



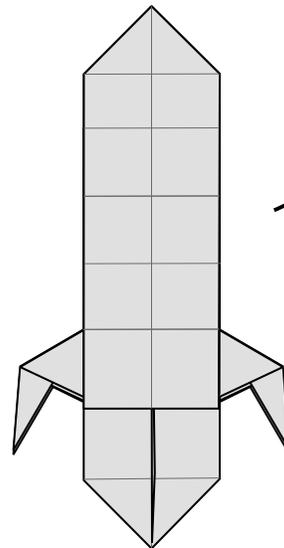
35. Repeat steps 30-34 on the left.



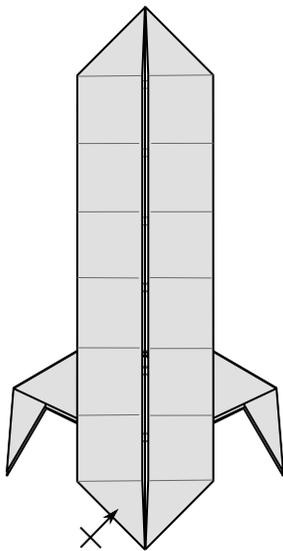
36. Fold down a single layer.



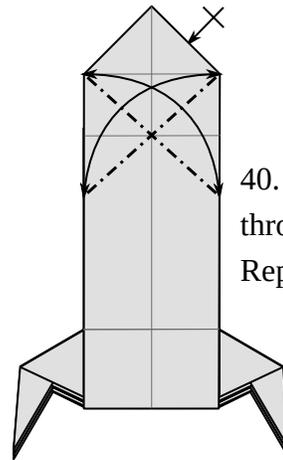
37. Fold down.



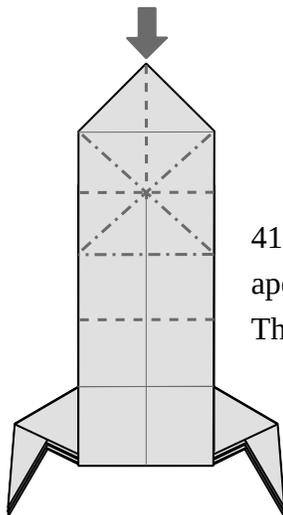
38. Turn around.



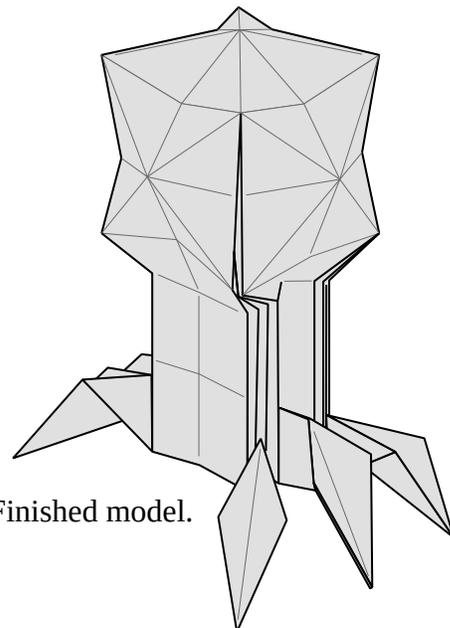
39. Repeat steps 30 to 37.



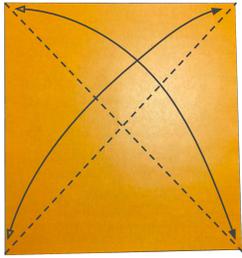
40. Precrease firmly through all layers. Repeat behind.



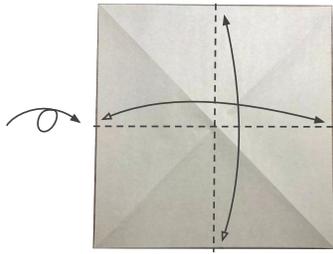
41. Gently push the apex to add volume. Then shape to taste.



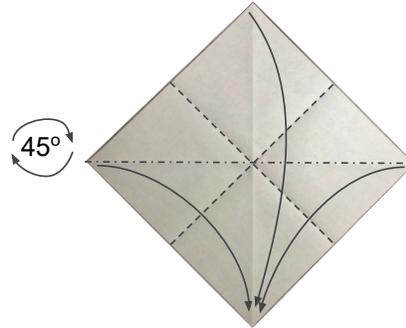
42. Finished model.



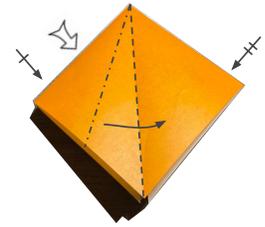
1. Begin with the color side up. Fold and unfold along the diagonals. Flip over.



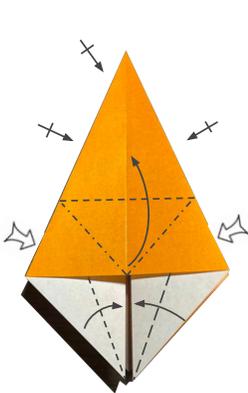
2. Fold and unfold in half horizontally and vertically. Rotate 45°.



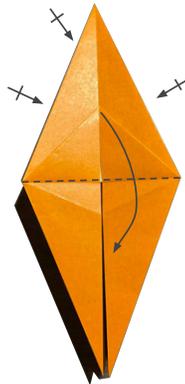
3. Collapse into a preliminary base by bringing all off the corners to the bottom.



4. Squash fold. Repeat on the other three flaps.



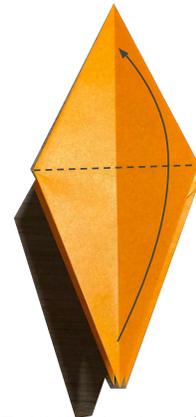
5. Petal fold. Repeat three times (on the left, right, and back).



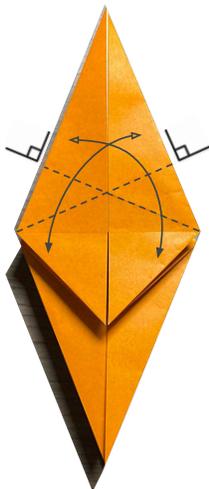
6. Fold down. Repeat three times (on the left, right, and back).



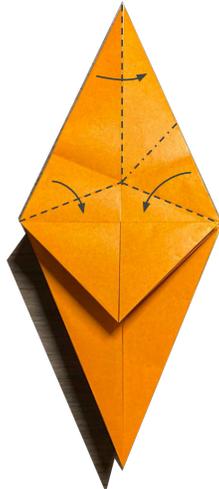
7. Fold one flap to the right in front and one to the left behind.



8. Fold the bottom flap right up.



9. Fold and unfold through the corners, perpendicular to the edges.



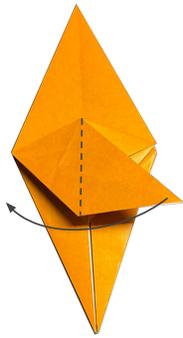
10. Rabbit ear fold using the precreases.



11. Pull out some loose paper.



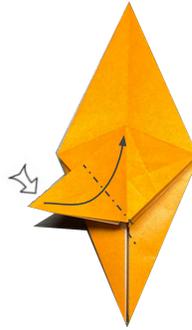
12. Inside reverse fold.



13. Fold the corner out.



14. Repeat steps 11 and 12 here.



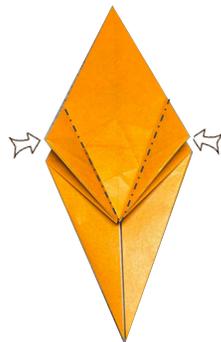
15. Inside reverse fold the corner inside.



16. Inside reverse fold again.



17. Fold and unfold along the angle bisector. Repeat on the other side so that both the left and right are precreased.



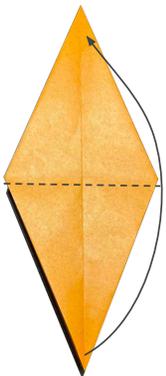
18. Mixed sink along precrease. The top half of the sink should be a closed sink, and the bottom half should be an open sink. Repeat on the other side.



19. Repeat steps 8-18 the back side.



20. Fold 2 flaps to right in front and 2 flaps to the left behind.



21. Fold the flap



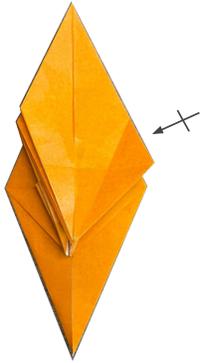
22. Fold and unfold at angle bisectors.



23. Spread sink.



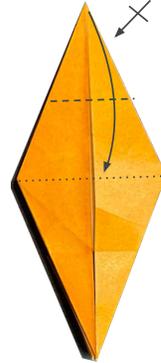
24. Fold a layer back.



25. Repeat steps 23-24 on the other side.



26. Repeat steps 21-25 on the back.



27. Fold the corner down Repeat behind. Getting the reference point exact is not important. This crease controls the size of the claws.



28. The next few steps will be very similar to steps 9-16. Fold and unfold through the corner and perpendicular to the edges.



29. Rabbit ear fold.



30. Pull out the outer edge as far as possible.



31. Fold the corner to other side.



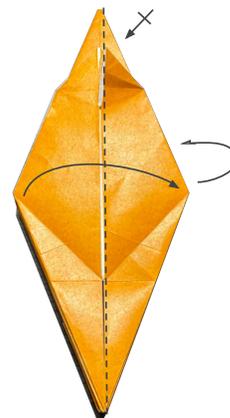
32. Repeat steps 30 and 31.



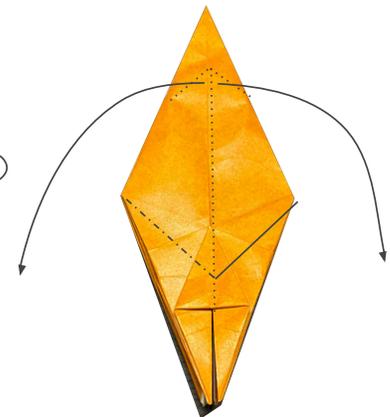
33. Inside reverse fold the white corner.



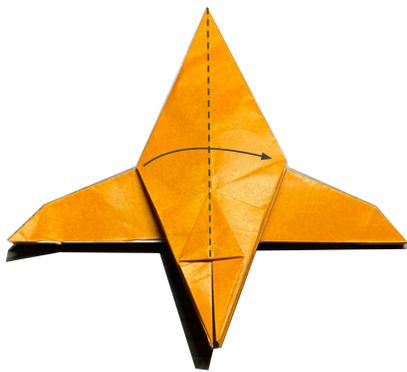
34. Inside reverse fold.



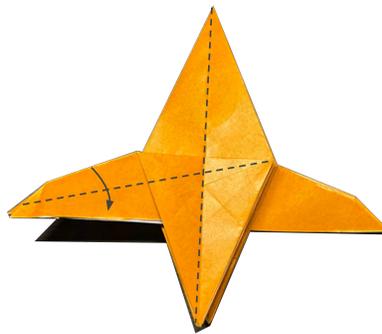
35. Repeat steps 28-34 on the back. Then, Fold three flaps to the right in front, and three to the left in the back.



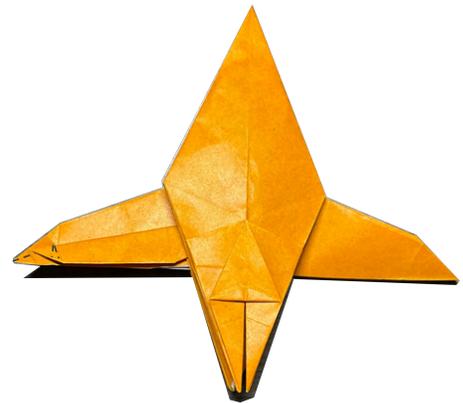
36. Inside reverse fold the long corners out to the sides.



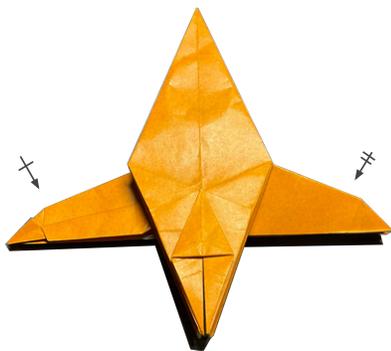
37. Fold two flaps to the right.



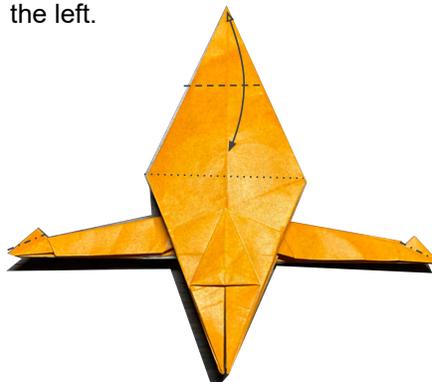
38. Fold edge to edge. Then, fold the two flaps on the right back to the left.



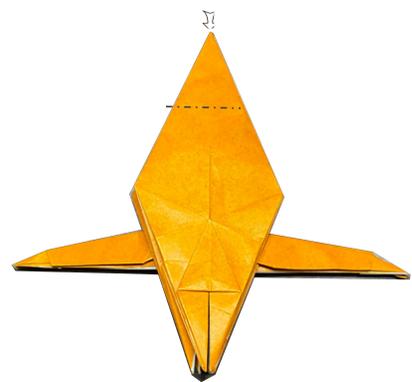
39. Thin the tip by reverse folding it.



40. Repeat steps 37-39 three times.



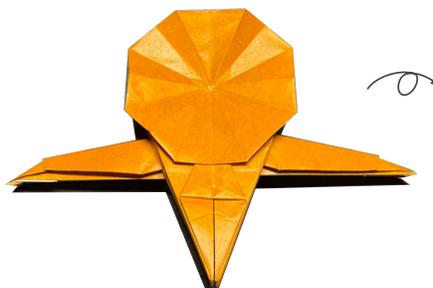
41. Inside reverse fold the corners. Also, fold and unfold the top corner, not quite to the halfway point.



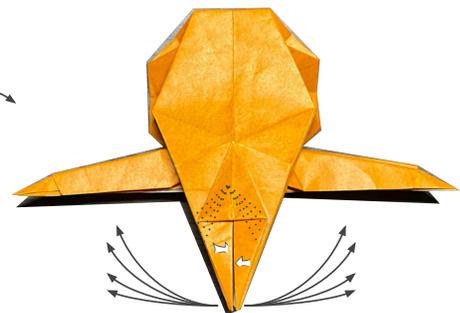
42. Sink the top corner.



43. Valley fold through the sunken tip and spread open the layers of the sink. Look at the next step for the intended result.



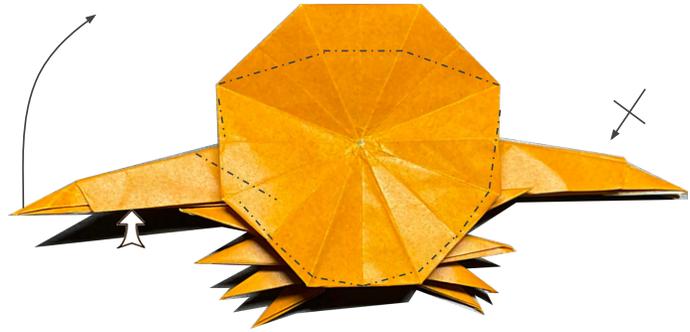
44. The result of the previous step. Flip the paper over.



45. Spread out the legs by reverse folding them.

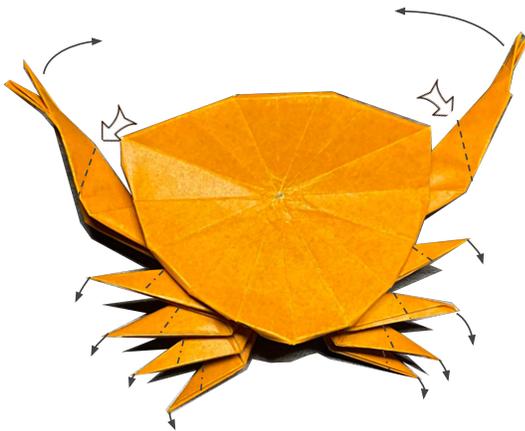


46. Fold the shell down.



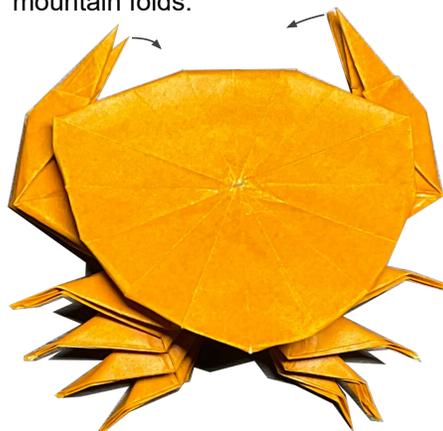
47. Inside reverse fold near base of the claw. You don't need to flatten all the way to the tip of the claw. Repeat on the other claw.

To shape the shell, make lots of mountain folds.



48. Outside reverse fold the claws.

Mountain fold the legs to create joints.



49. Spread open the claws.



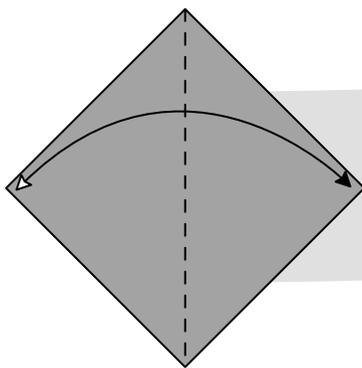
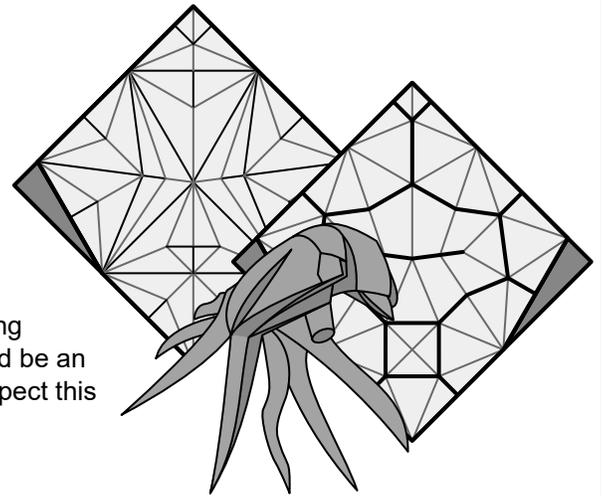
50. Finished crab.

# Septopus

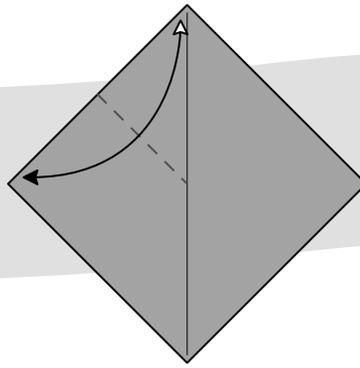
Model and Diagrams by Albert Tran  
 Recommended Size: 25 cm.

This model was designed while messing with Lang's Treemaker. I was looking for an arrangement of seven equally-sized flaps along the edge of the paper. I thought an octopus with seven arms would be an appropriate subject, since they can grow back lost limbs. Don't expect this one to do that though!

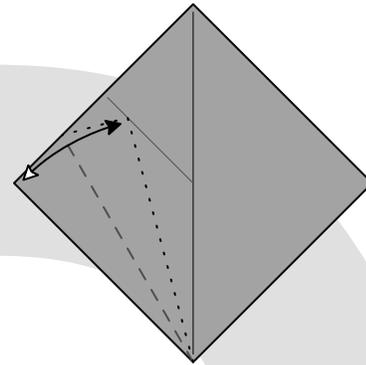
Designed in 2021, revised in 2022.



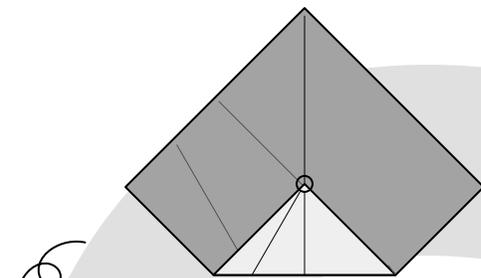
1. Fold in half and unfold.



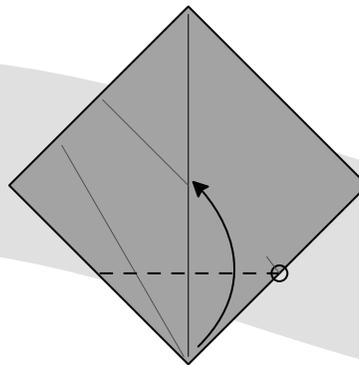
2. Fold in half lightly and unfold.



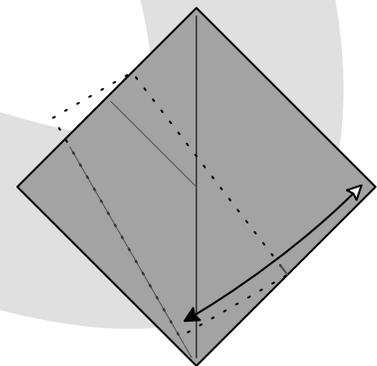
3. Bring the corner to the crease and lightly crease.



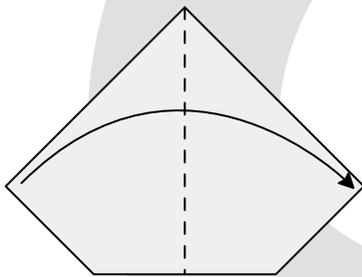
6. Note that the corner does not touch the center of the paper. Flip over.



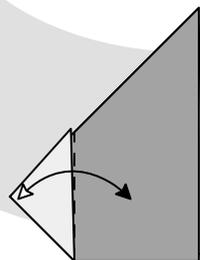
5. Fold the corner up using the mark.



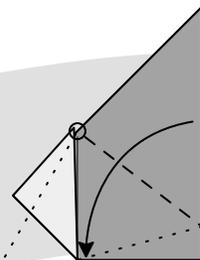
4. Bring the edge to the crease so that they line up. Mark the lower edge.



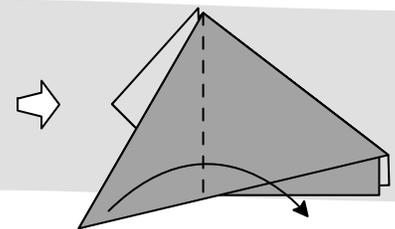
7. Creases from steps 2-4 are omitted. Fold in half and rotate.



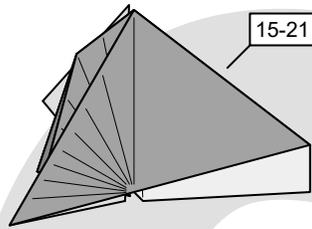
8. Fold along the edge and unfold.



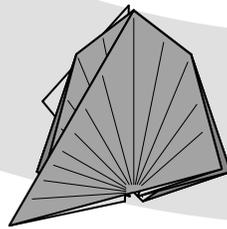
9. Starting from the circled point, fold the corner down so that the right edge touches the bottom corner. Zoom in.



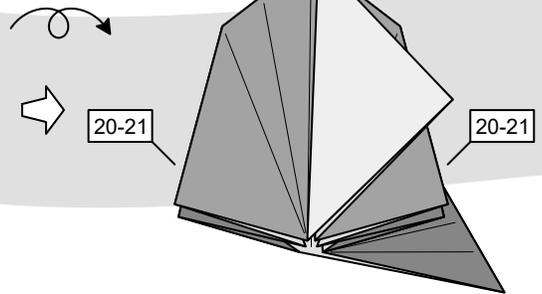
10. Fold along the edge behind.



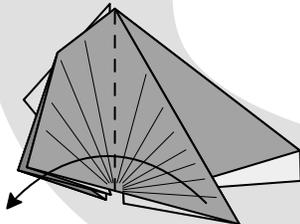
23. Repeat steps 15-21 on this side



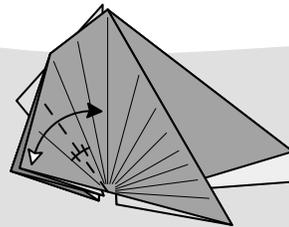
24. Flip over and zoom in.



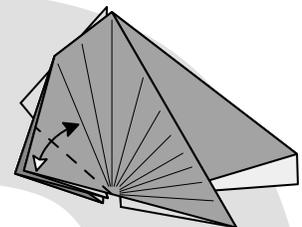
25. Repeat steps 20-21 on the remaining layers.



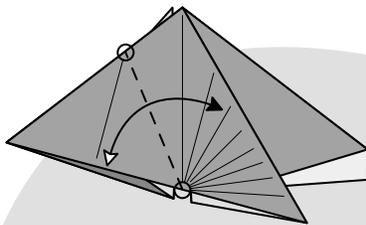
22. Fold the flap over.



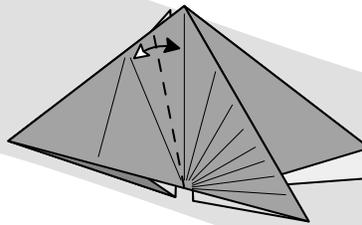
21. Fold an angle bisector and unfold.



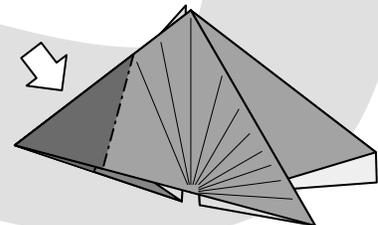
20. Bring the edge of one layer to the crease and unfold.



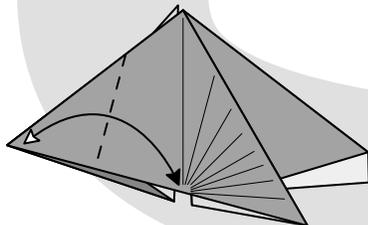
17. Fold between the circled points and unfold.



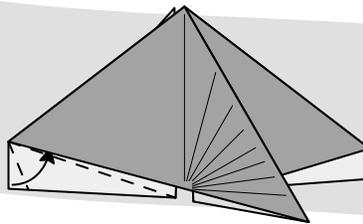
18. Bring the crease to the center and unfold.



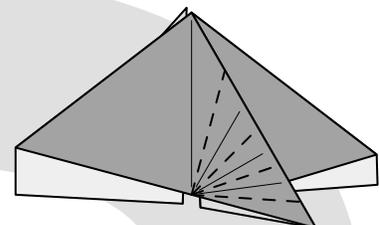
19. Reverse-fold the corner.



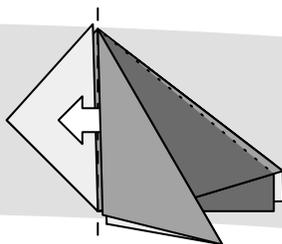
16. Bring the corner to the middle and unfold.



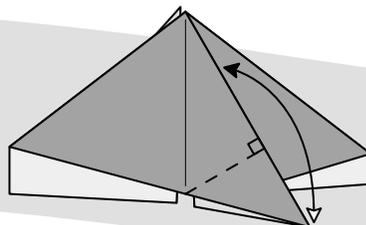
15. Fold the excess paper inside.



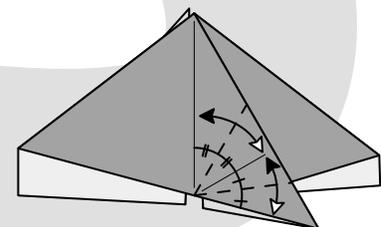
14. Fold angle bisectors and unfold.



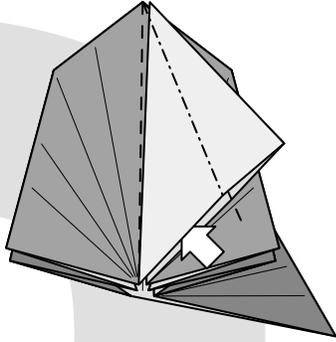
11. Pull out the partially hidden layer



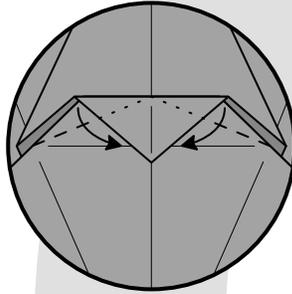
12. Fold along the edge and unfold.



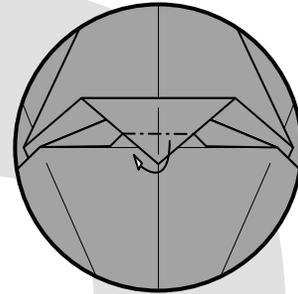
13. Fold angle bisectors and unfold.



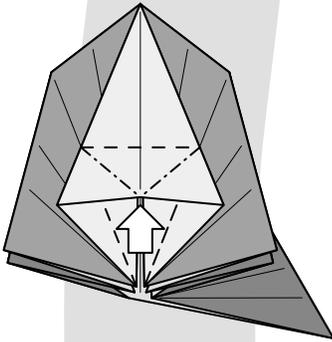
26. Squash-fold.



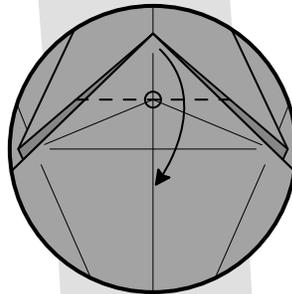
33. Refold the creases from step 31 under the flap.



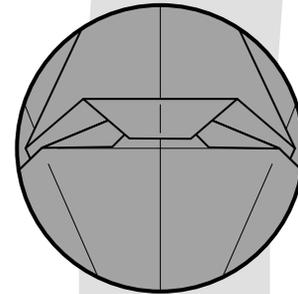
34. Tuck the tip underneath



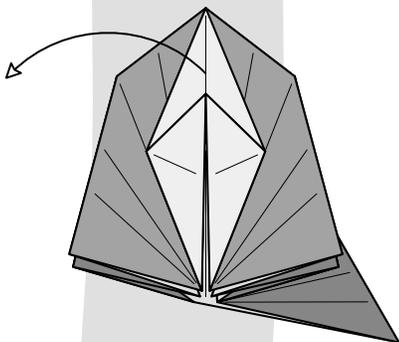
27. Petal-fold the edge.



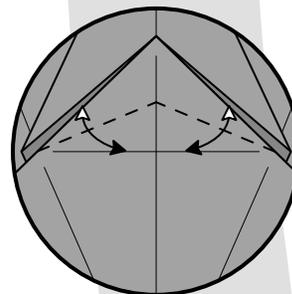
32. Fold the corner down at the intersection.



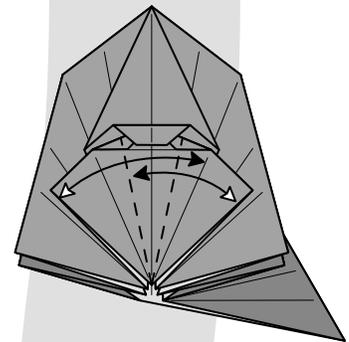
35. Return to full view.



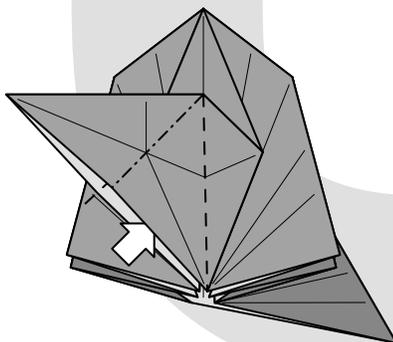
28. Unfold the top layer (undo step 5).



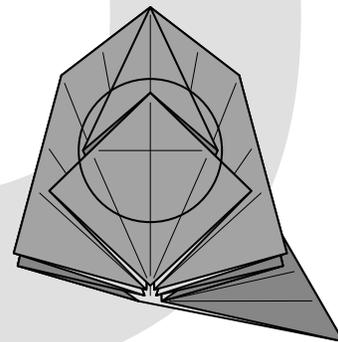
31. Bring the edges to the crease and unfold.



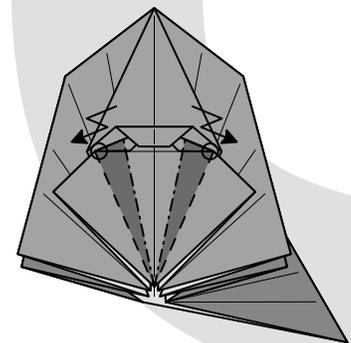
36. Fold and unfold angle bisectors on the first layer.



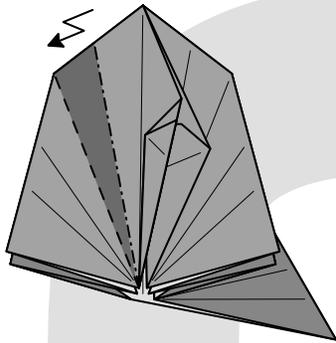
29. Squash-fold.



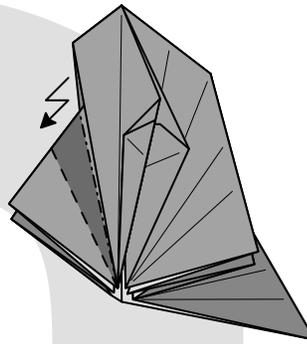
30. Focus on the circled flap.



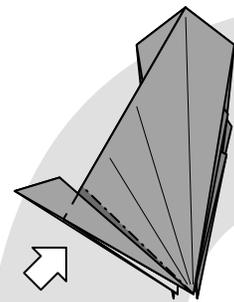
37. Crimp using the existing creases. The dotted corners will be closed-sunk.



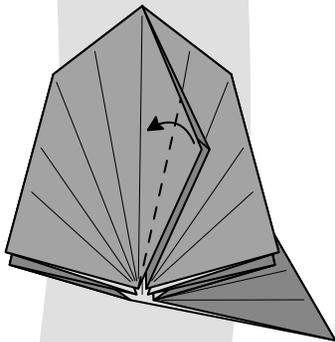
41. Crimp using the existing creases.



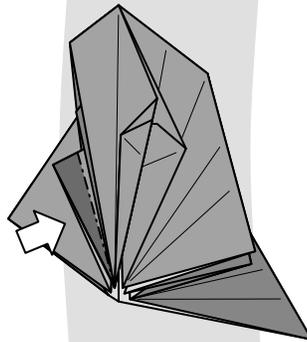
42. Crimp using the existing creases.



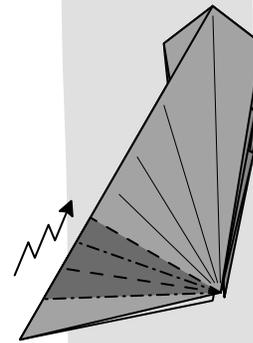
49. Reverse fold while rabbit-earing the corner.



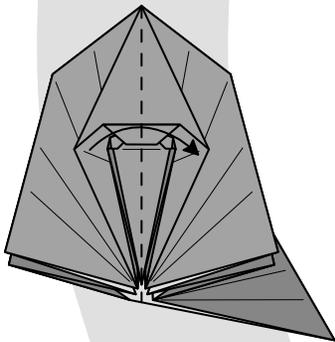
40. Fold the edge to the center.



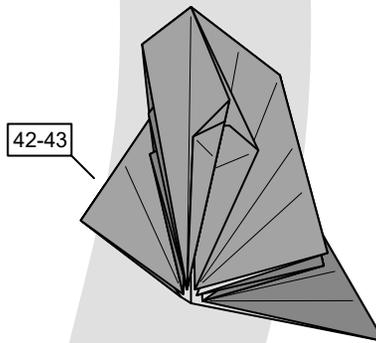
43. Reverse-fold the remaining layer.



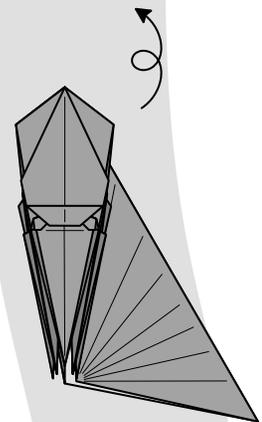
48. Crimp twice using the existing creases.



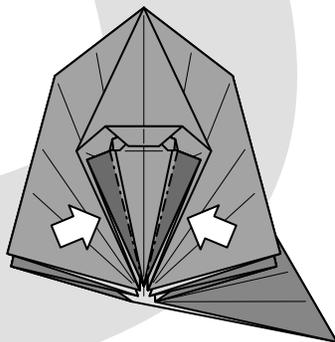
39. Fold a layer over.



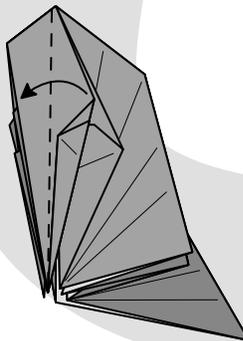
44. Repeat steps 42-43 on the next layer.



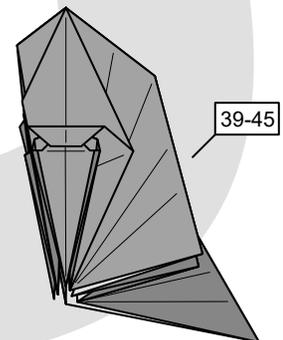
47. Flip over.



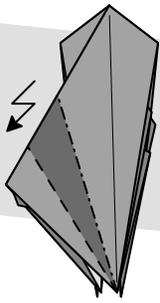
38. Reverse fold the remaining edges.



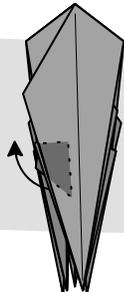
45. Fold one layer back.



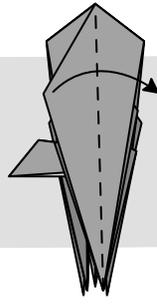
46. Repeat steps 39-45 on the other side.



50. Crimp using the existing creases



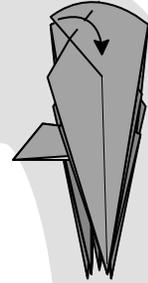
51. Pull out the corner from step 49.



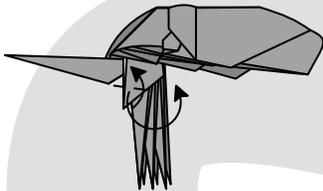
(optional). Fold the layer over if you want the siphon to be on the other side.



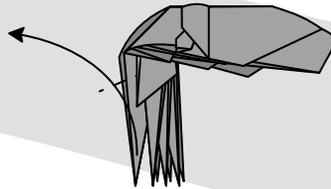
52. Pleat the top. The model will no longer lie flat.



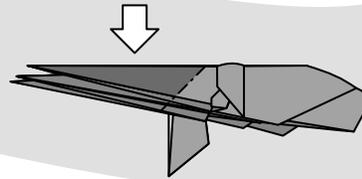
53. Fold the tip to lock.



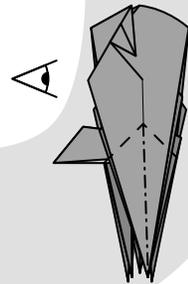
57. Round out the siphon and make it tube-like.



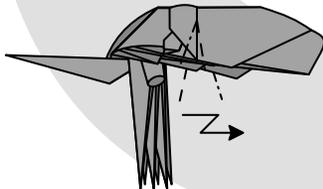
56. Fold the middle flap out to lock.



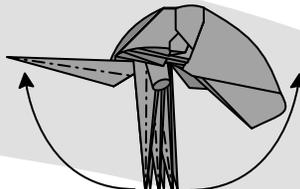
55. Side view of step 54.



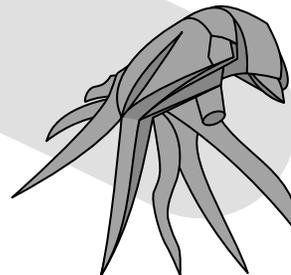
54. Reverse-fold the entire arm assembly. The next step will be a side view.



58. Pleat the mantle downwards on both sides.



59. Thin and curl the arms.



60. The completed Septopus.

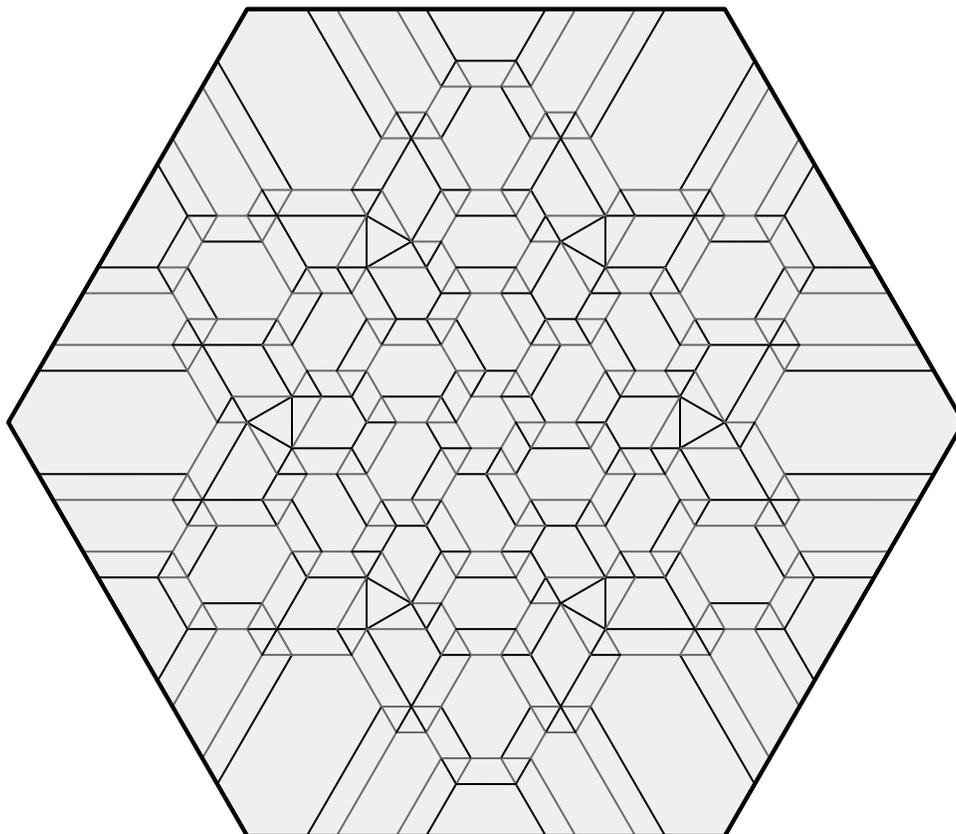
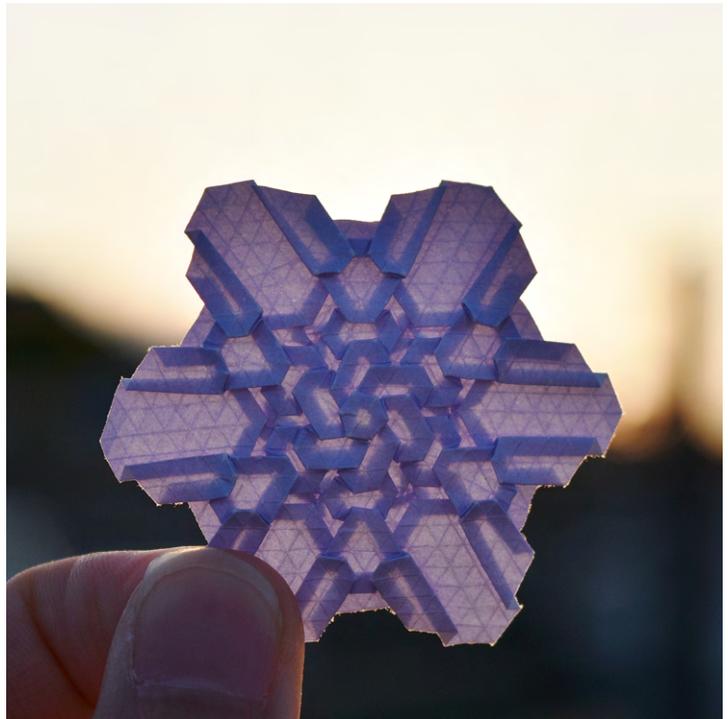
# Lotus Tessellation

Model by Kelly Tan

Recommended size: 15 cm.

Start with a hexagon, and fold a triangular grid that divides each side into 16ths. You may have to brush up on some common hexagonal tessellation techniques, such as the triangular twist and the hexagonal twist.

Designed in 2019.



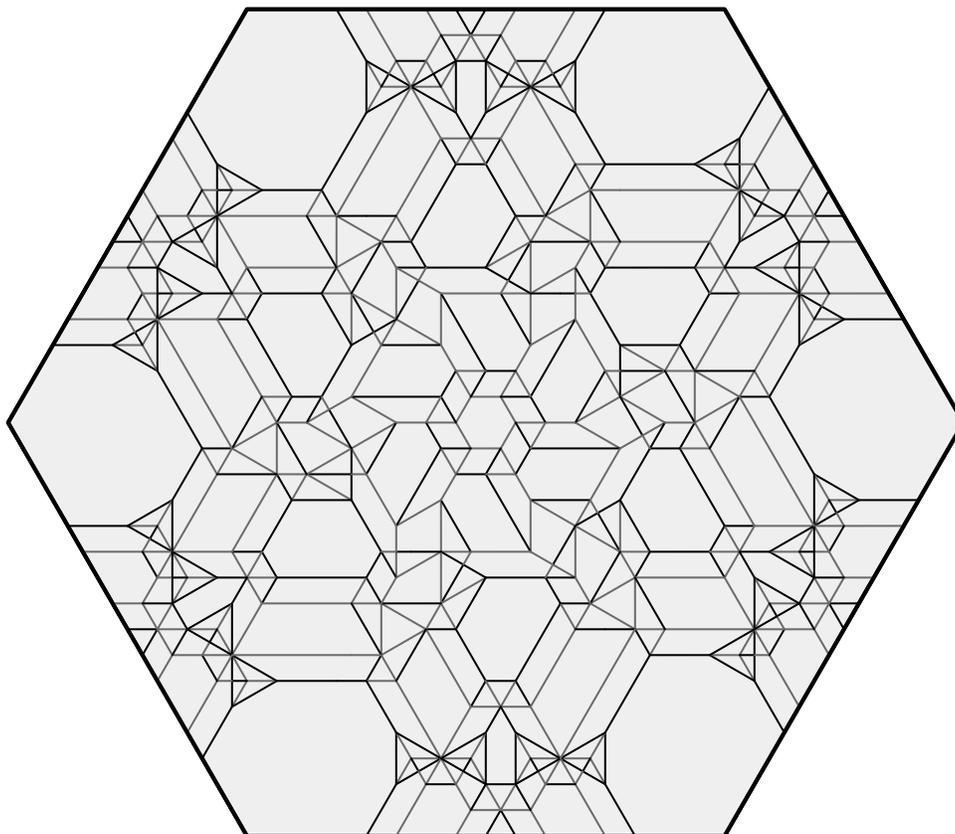
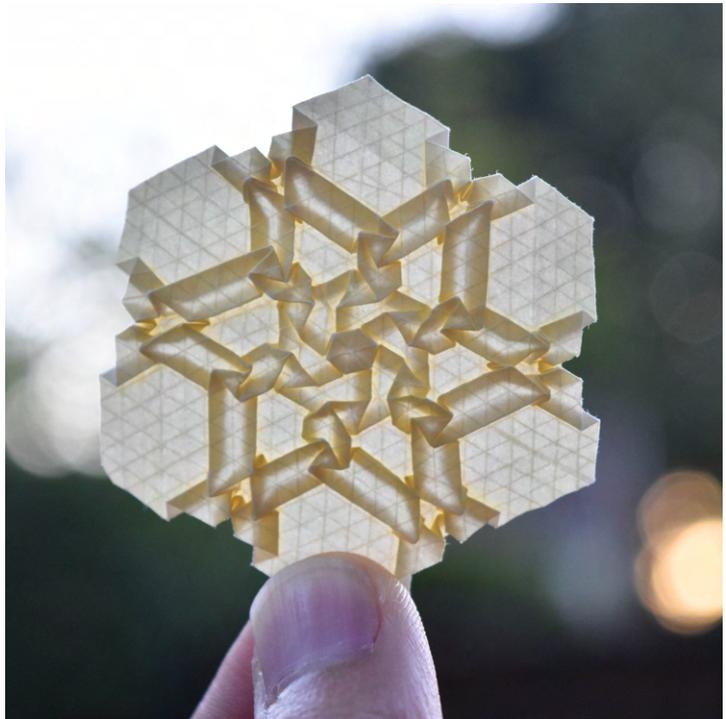
# Six-Pointed Star

Model by Kelly Tan

Recommended size: 15 cm.

This tessellation starts off the same way as the Lotus Tessellation and uses the same techniques- however, it is slightly more difficult to fold.

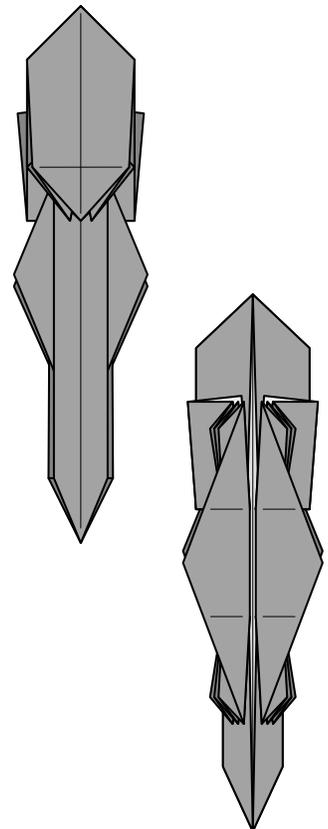
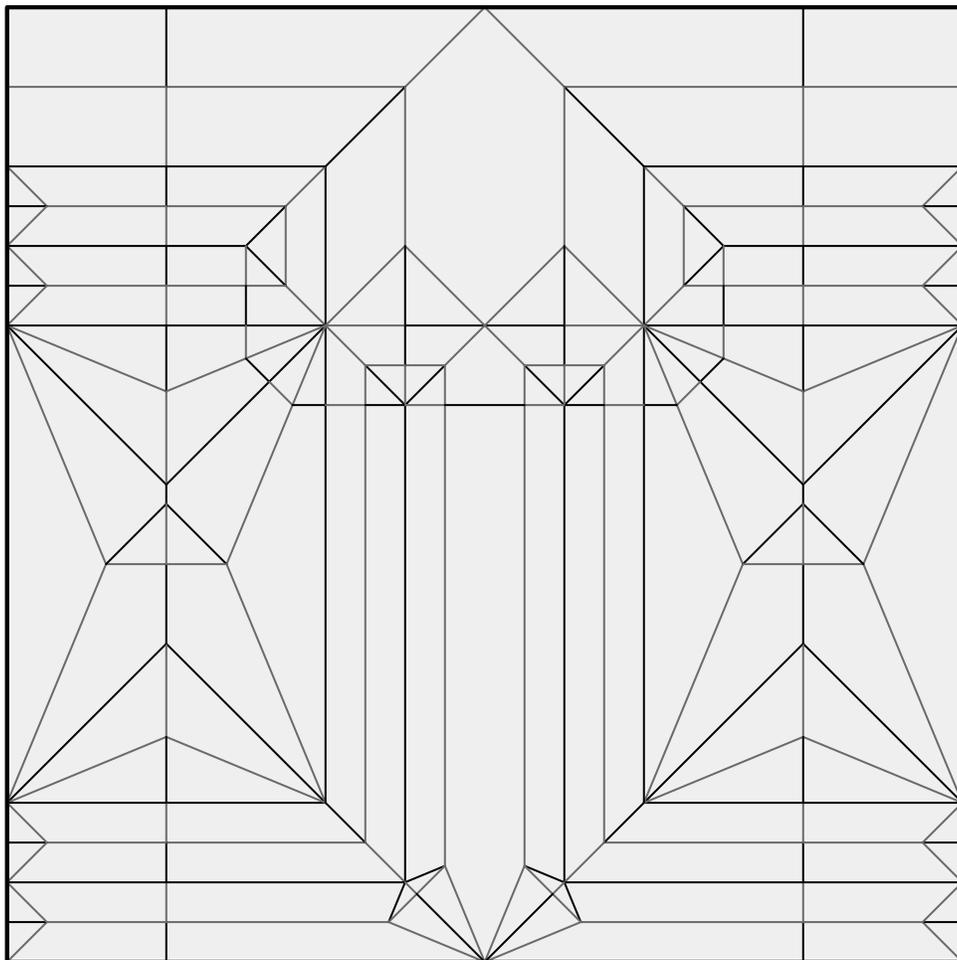
Designed in 2020.



# Bearded Dragon

Model by Chris Randall  
Recommended size: 15 cm.

This model is featured on the CalLink profile for Cal Origami!

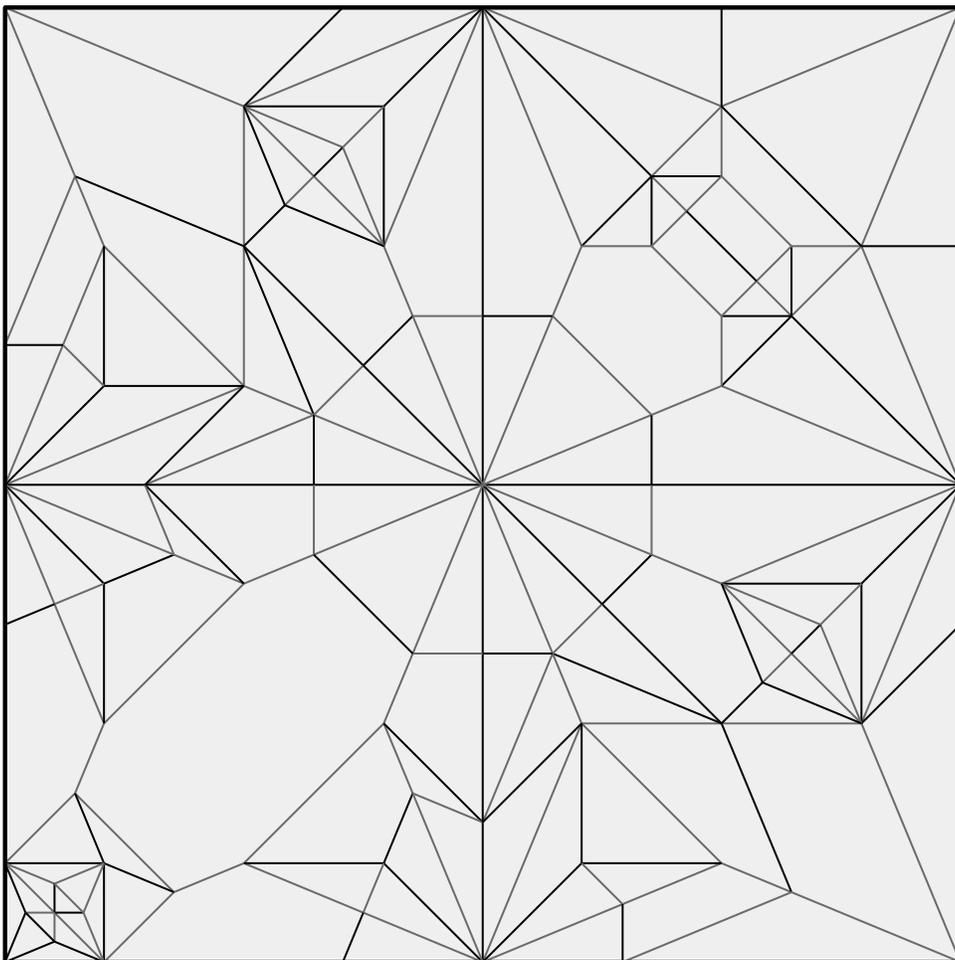
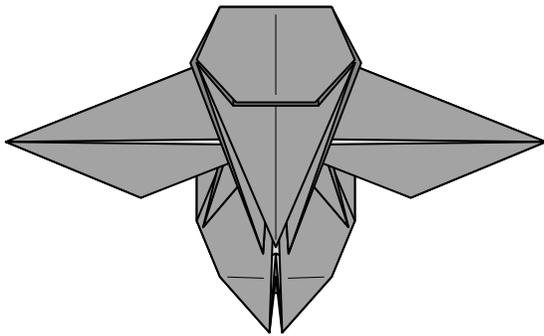


24 x 24 grid.

# Baby Cthulhu

Model by Chris Randall  
Recommended size: 24 cm.

Based on a blintzed frog base.



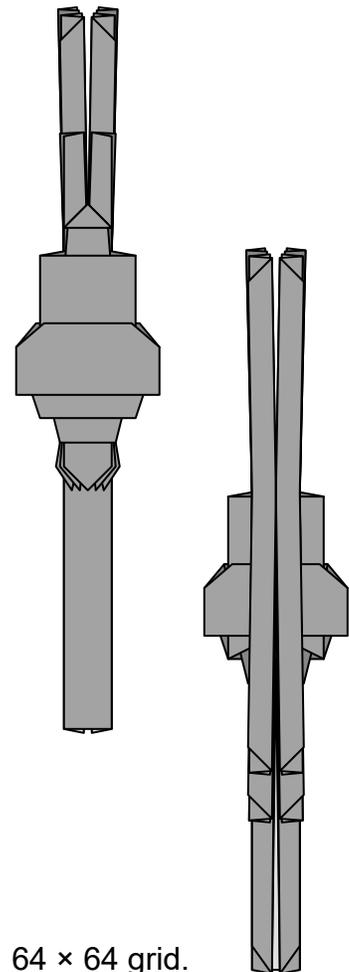
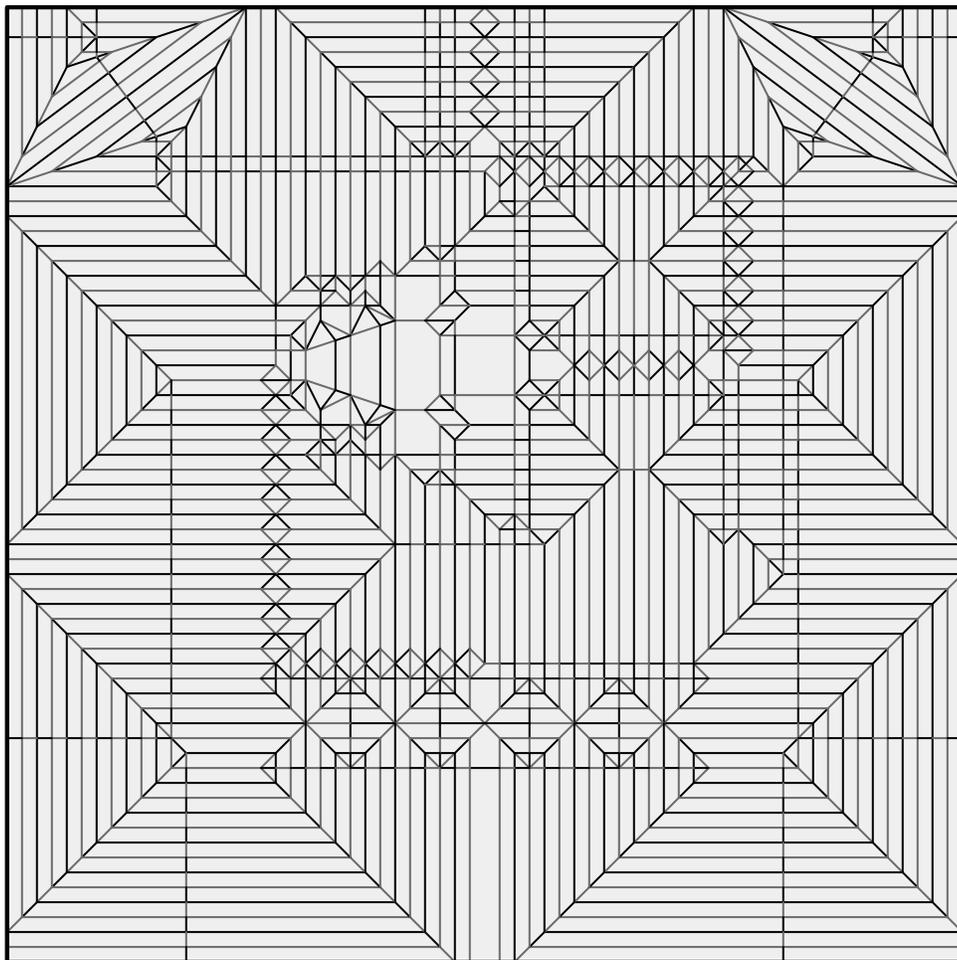
# C. yingi

**Model by Jacob Stebleton**  
**Recommended size: 50 cm.**

I designed this model, Chimerarachne yingi, for an online informal challenge (the topic was "Prehistoric"). I've never seen another origami version- before or since- and I wanted the challenge of being the first. To use the inner paper as wisely as possible, I was forced to rotate the body; this necessitated the use of an unusual technique to arrange the layers properly. The collapse is tricky but rewarding. Good luck!



Single-tissue is recommended to fold this model.



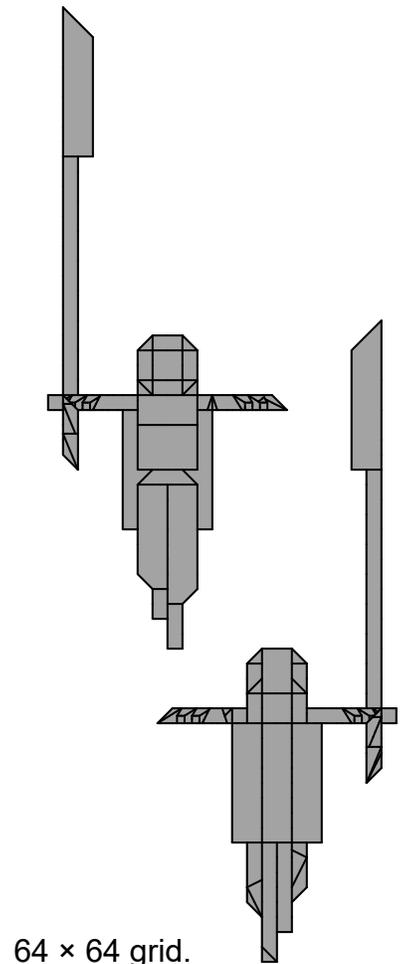
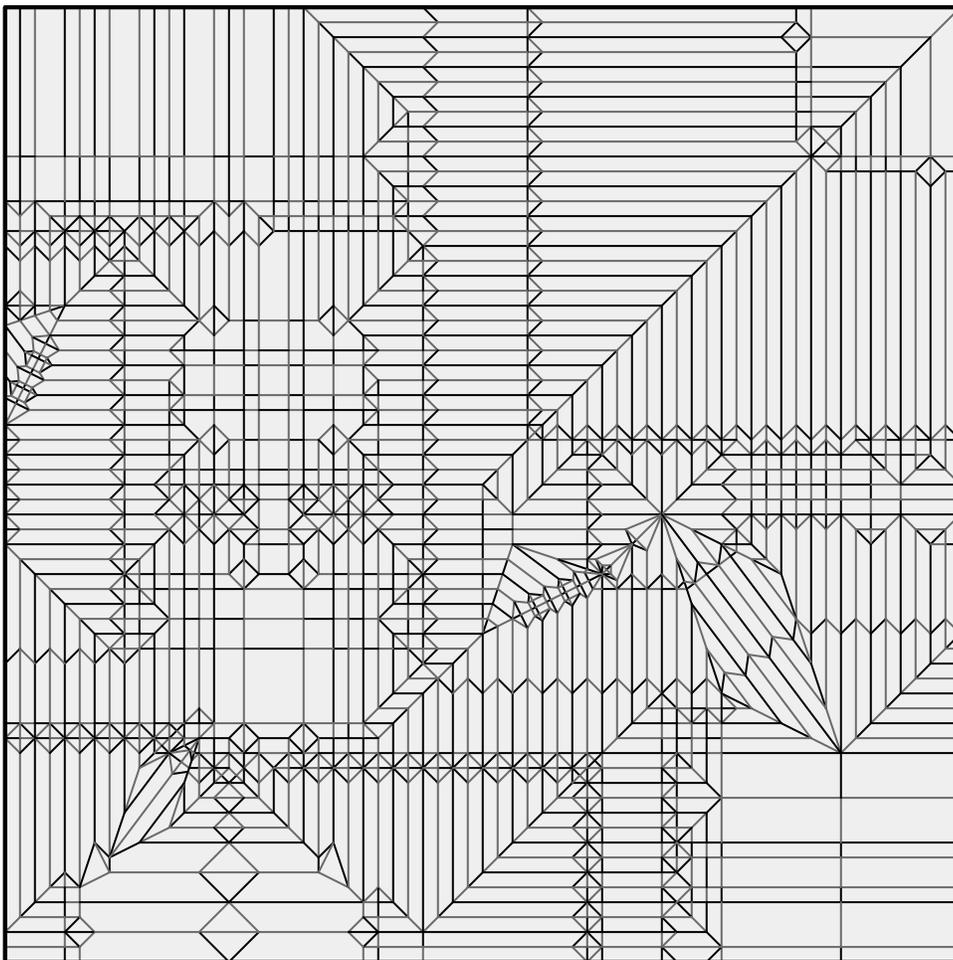
64 × 64 grid.

# Gehrman

Model by Colton Wang  
Recommended size: 50 cm.

Although the hat structure ended up relatively simple, most of my time was spent figuring it out because I believe it is a main focal point of this model. The hat takes up a lot of space, so originally the head area and hat were made with partials to lower grid size. However, this first draft was very disproportionate and hard to fold, so I increased the grid size a little bit to get rid of all partials, making the model easier to fold and much more proportionate.

Use very thin paper. I used unryu for my fold but it got a bit thick in certain areas.



64 × 64 grid.



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MARCH 19TH, 2023**