

Christmas  
Origamibook  
2006

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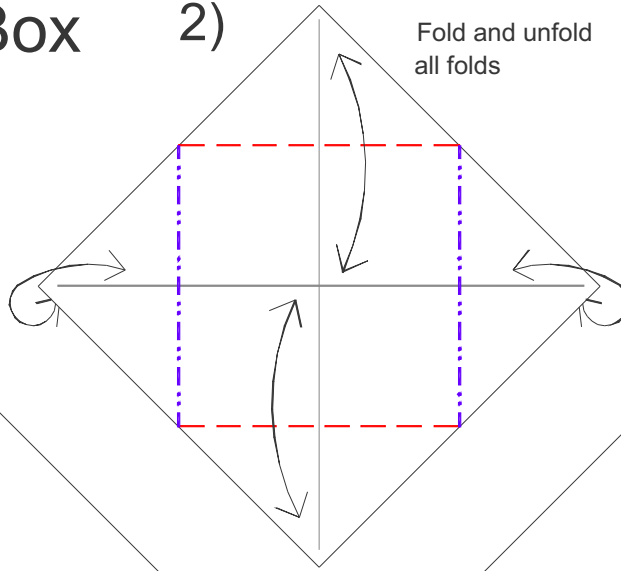
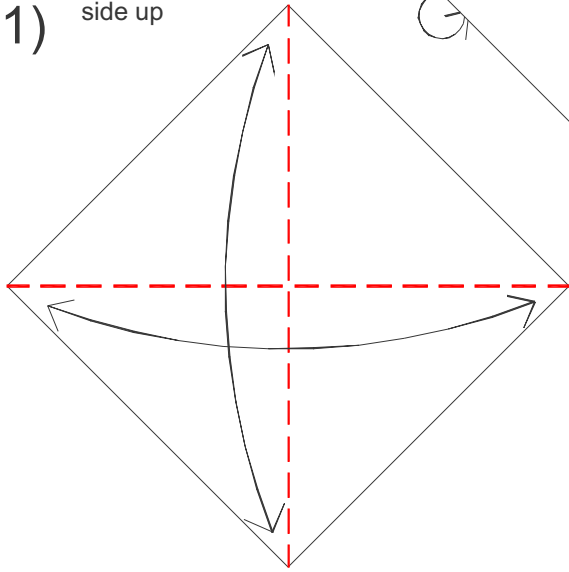
# Hearty Bear Box

2)

Fold and unfold  
all folds

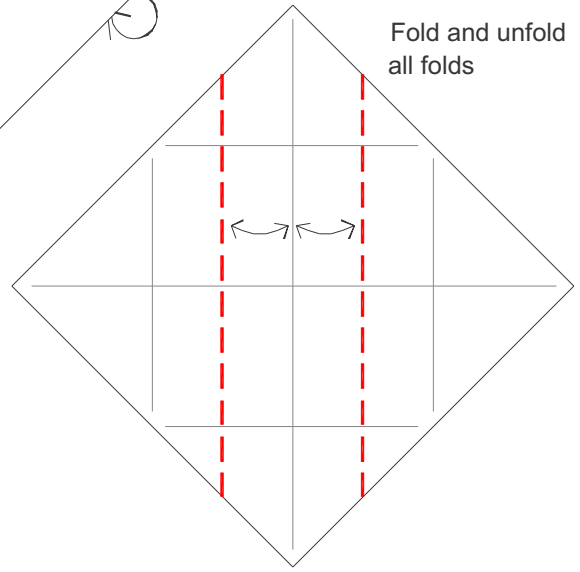
October 2006

1) Start with white  
side up



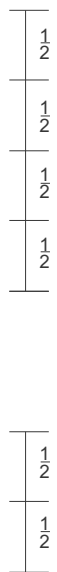
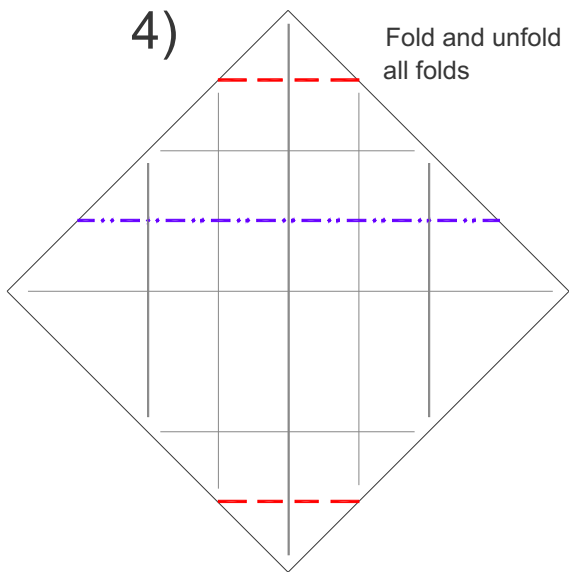
3)

Fold and unfold  
all folds



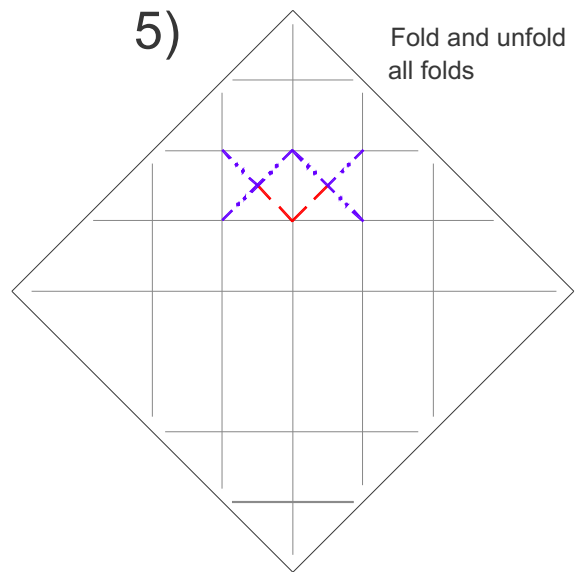
4)

Fold and unfold  
all folds



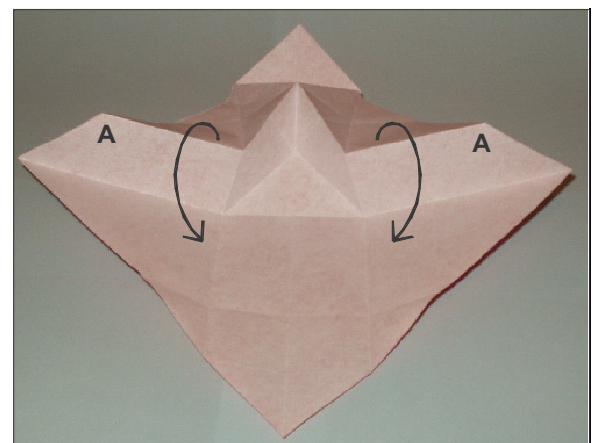
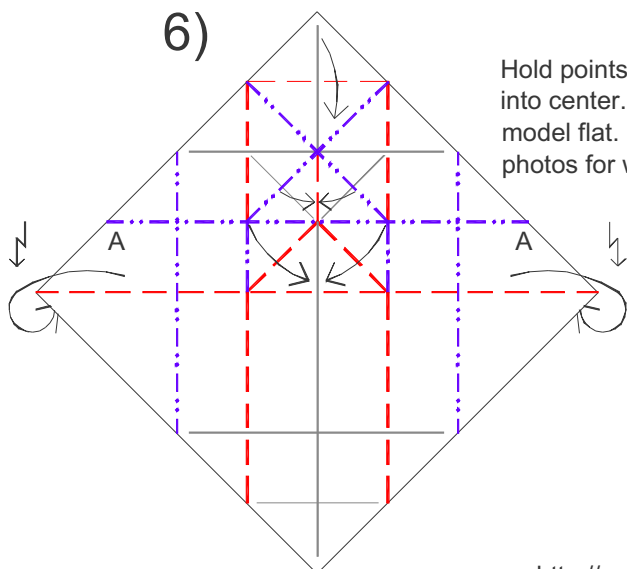
5)

Fold and unfold  
all folds



6)

Hold points A and push  
into center. Do not press  
model flat. Look at the  
photos for what I mean



Mike Bright - 2006

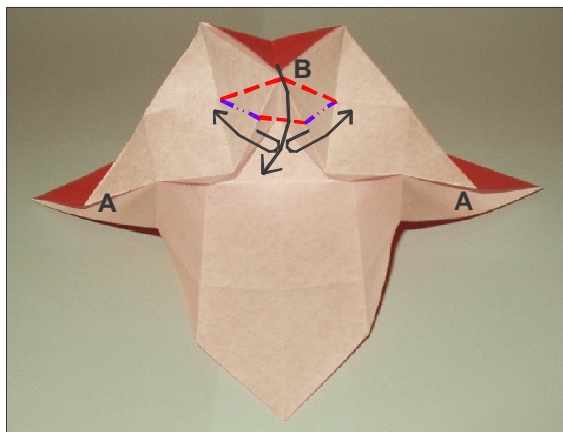
Page 1

<http://www.geocities.com/mikebr2003/>

Mid fold of step 6

# Hearty Bear Box (cont)

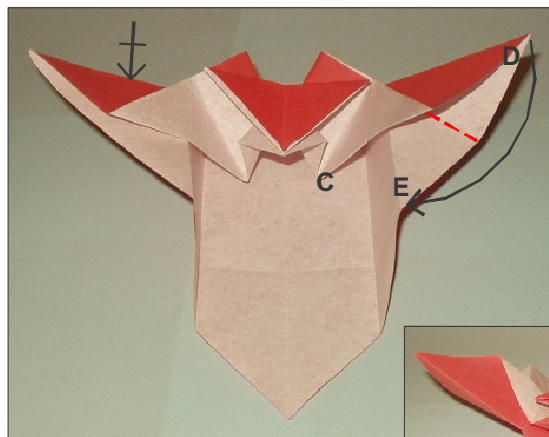
7)



Finish of step 6

Using the creases from step 5, open out centre of model, whilst pressing point B down flat. Once pressed down, let go of it. It will then spring back and find it's own natural position

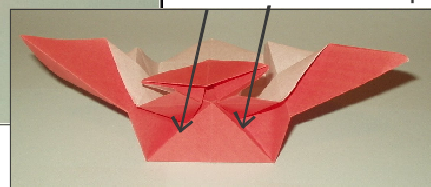
8)



Front View

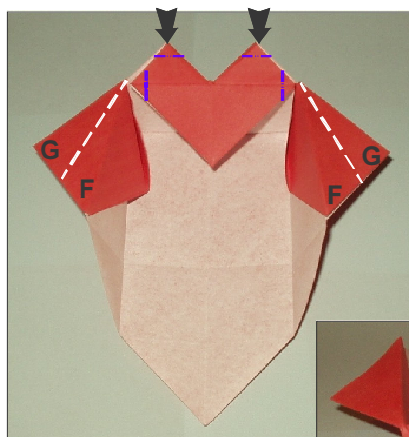
Fold point D over to point E. This will cause point C to move into model.

As point C will move into model, the rear flaps of the model can now be glued (gasp!) together to keep the eventual box in shape



Rear View

9)



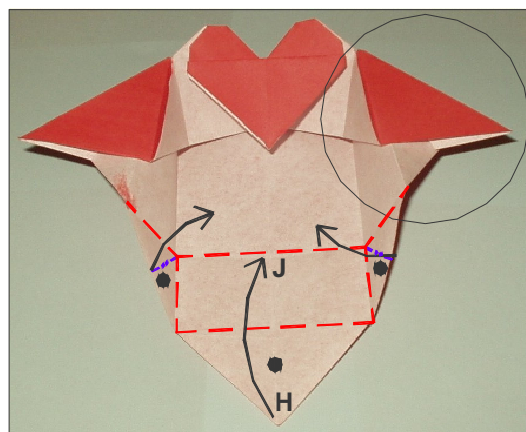
Front View

Fold just the top red flap from point F to G



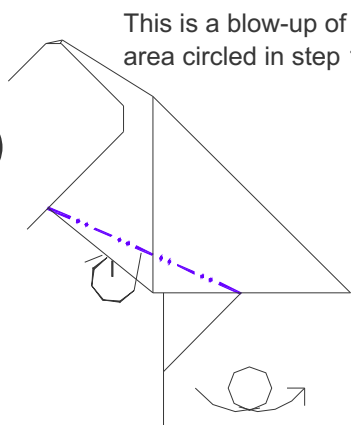
Rear View

10)



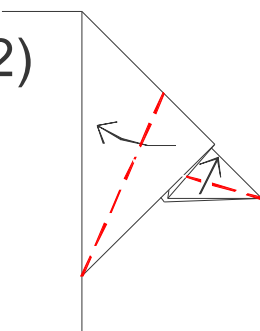
Fold point H to J first, then complete the other folds to form the sides of the box. Once folded, use glue (gasp again!), where marked with a solid circle to keep the box sides upright

11)



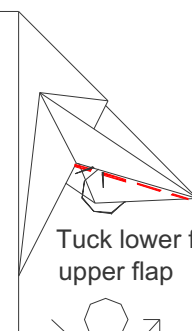
Repeat on arm on the other side of model

12)



Repeat on arm on the other side of model

13)

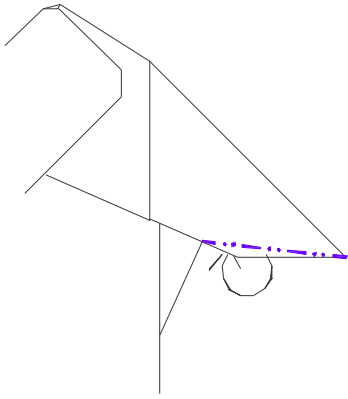


Repeat on arm on the other side of model

Tuck lower flap under upper flap

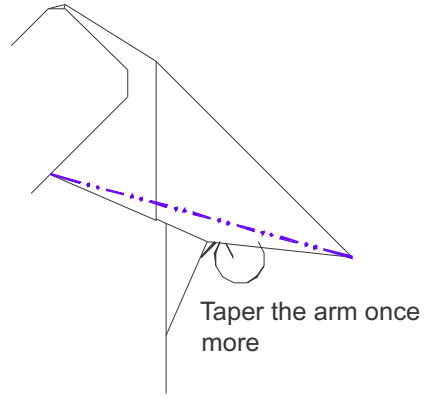
# Hearty Bear Box (cont)

14)



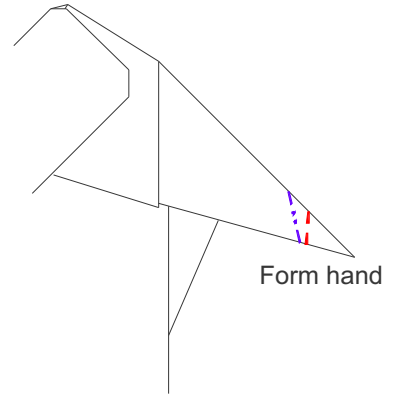
Repeat on arm on the other side of model

15)



Repeat on arm on the other side of model

16)



Repeat on arm on the other side of model

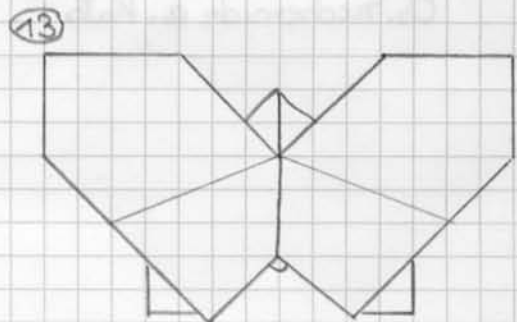
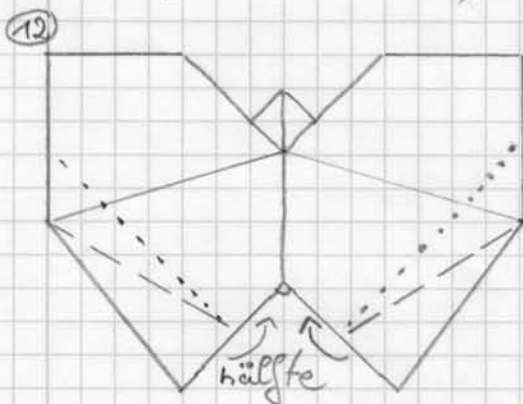
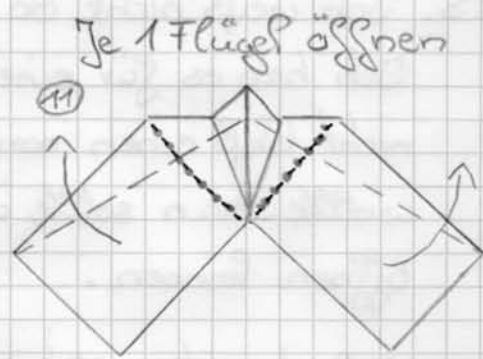
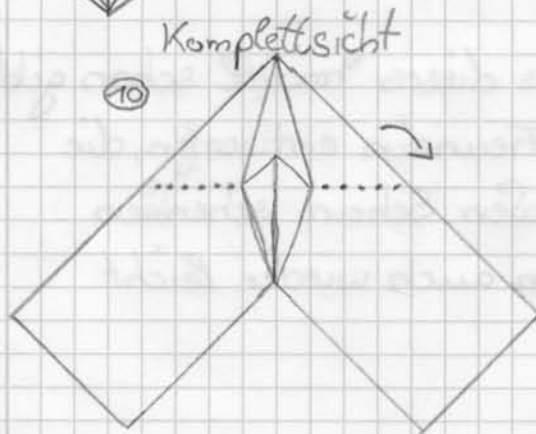
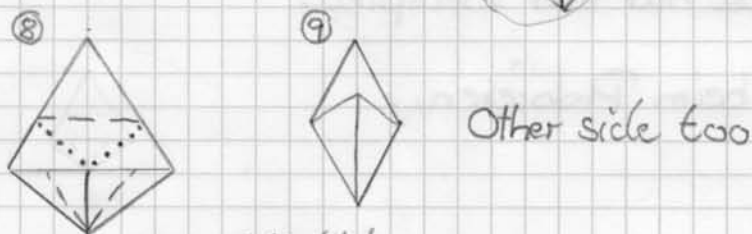
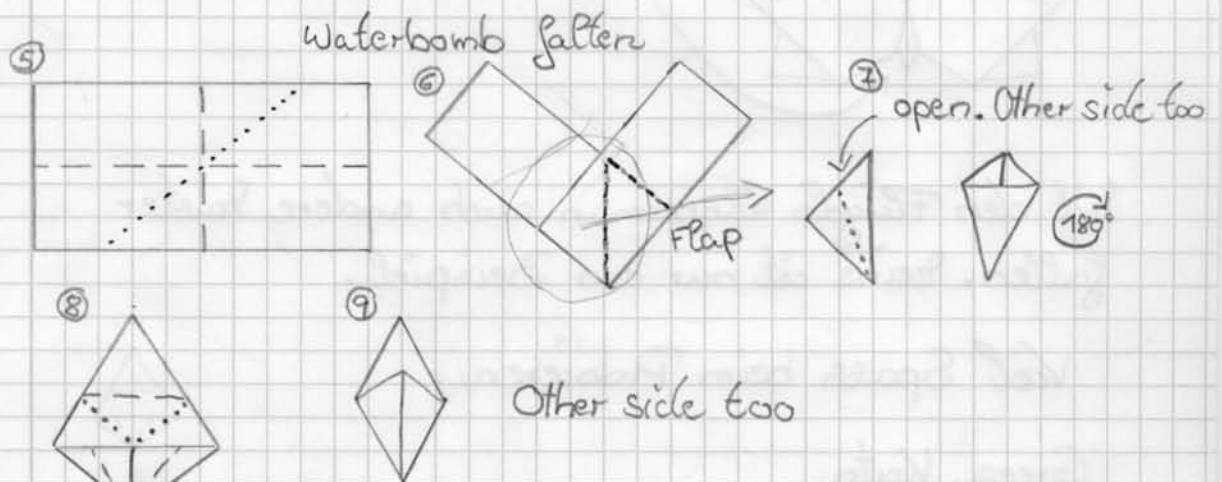
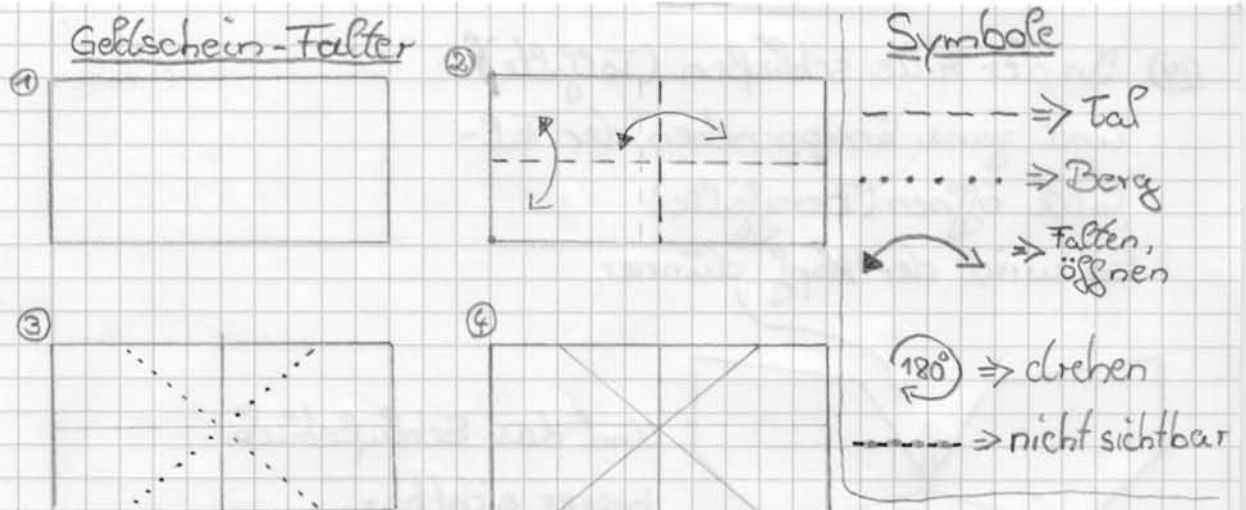
17)



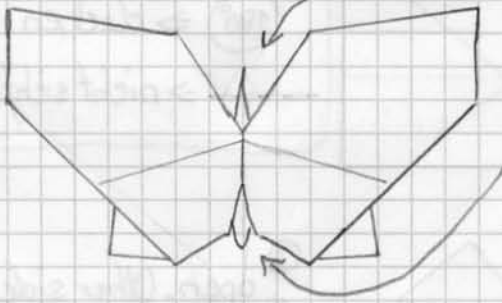
Voila!

I have named it the Hearty Bear Box because the heart shape combined with the arms makes it look like a bear to me. You'll probably differ in your opinion, though!

# Geldschein-Falter by Chrissy Mechernich



- ⑭ In der Mitte schließen (Talfalte)  
und ganz knapp neben der Tal-  
falte öffnen (Bergfalte)  
So wird der Kopf dünner.



Und das Schlußstück  
besser sichtbar.

Mit den Flügeln kann man auch andere Fenster  
falten. Meins ist nur ein Beispiel.

Viel Spass beim Probieren.

Grees, Kato.

P.S. Ich weiß nicht ob es dieses Modell schon gibt.

Ich hab es für eine Freundin entworfen, die  
nicht bloß einen normalen Schein schenken  
wollte. Man sollte ihn auch wieder leicht  
öffnen können.

Ch. Frecherrich & Kato

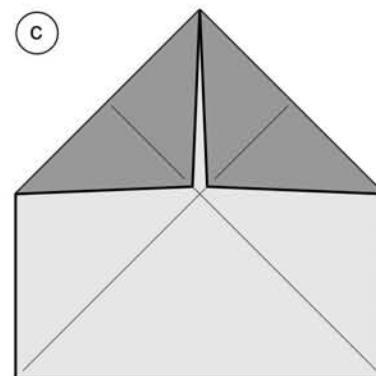
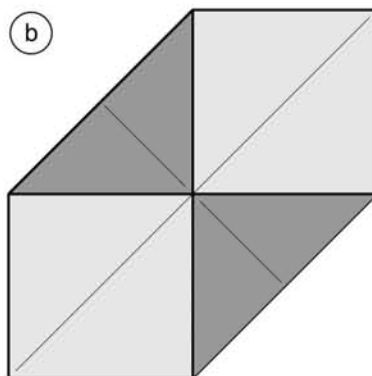
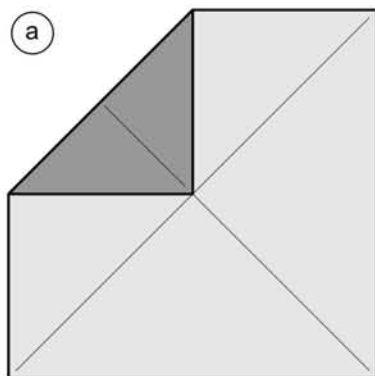
# Origami puzzles

after Kunihiko Kasahara composed Ondřej E. Cibulka

Origami puzzles are very exciting part of this ancient art. Try some types of the origami puzzles in this short article. All puzzles presented here are published in the book *The art and wonder of Origami* by Kunihiko Kasahara. There is also solution of each puzzle in that book, so if you will fail in solving...

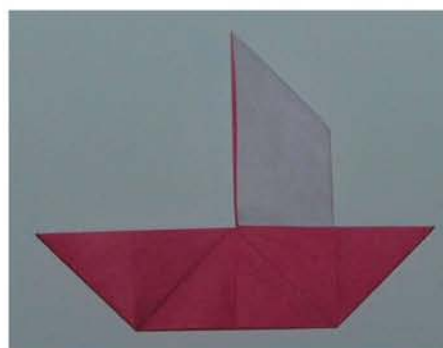
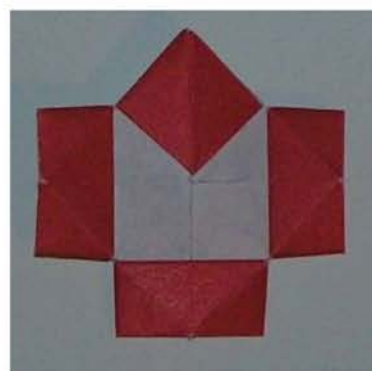
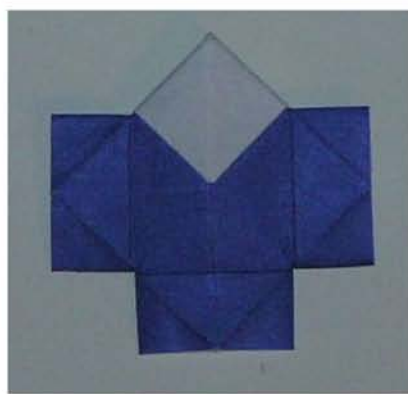
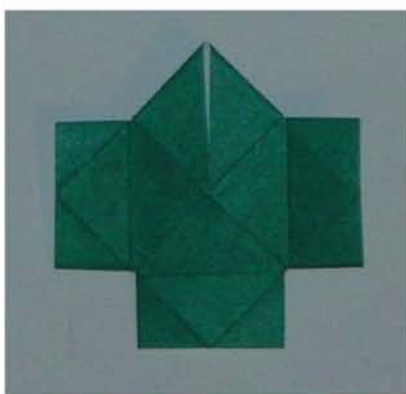
## (i) Proportional puzzles

When you are folding color-white paper, the colored and white sections of the model are frequently of equal size. There are not equal colored and white areas in the following forms. Can you make equal both sections by one fold? Each form has several solutions.



## (ii) Traditional model based puzzles

Almost each origamist knows how traditional japannease doll in kimono *Yakko-san* or traditional pinwheel and its variant sailboat look like and knows how to fold them. But who knows how to fold some exciting color-changed variants? You can look at *Yakko-san* and sailboat in traditional shape and in color-changed variants. Second variant of *Yakko-san* is not in Mr. Kasahara's book. It is created by Czech origamist Ondřej E. Cibulka and you can try to solve it, too. The solution of this puzzle is on the next page; it is surprisingly easy.



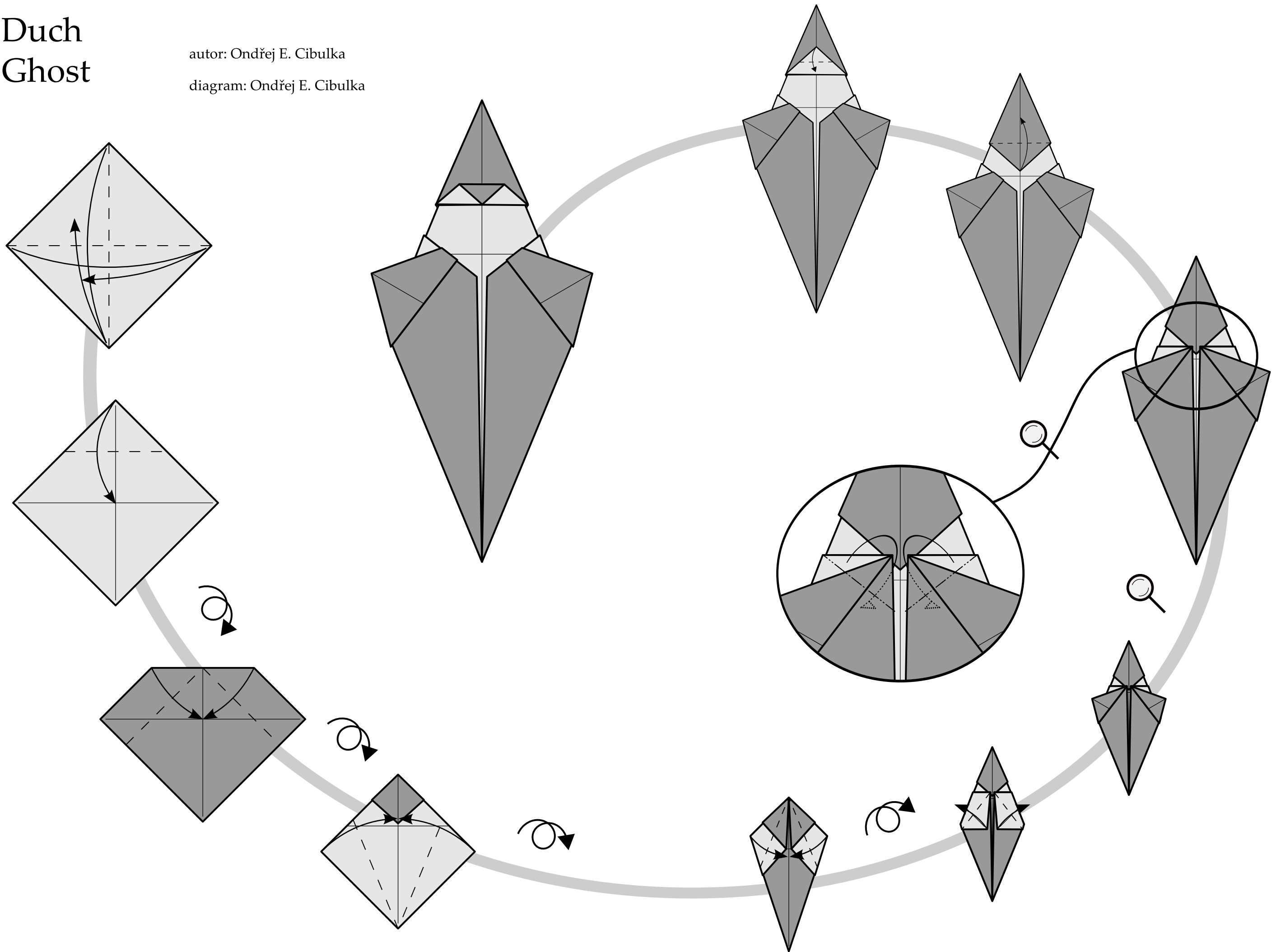


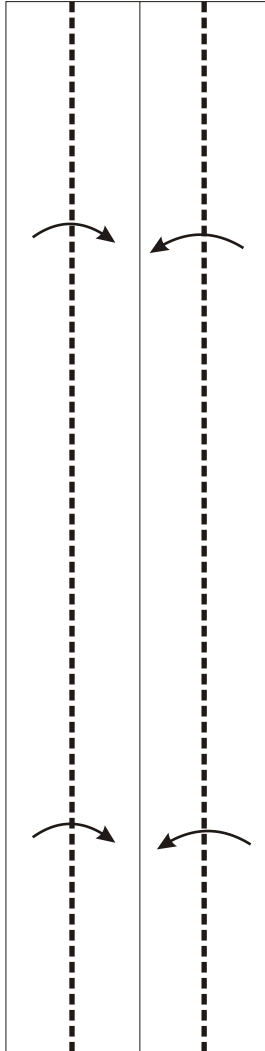


# Duch Ghost

autor: Ondřej E. Cibulka

diagram: Ondřej E. Cibulka

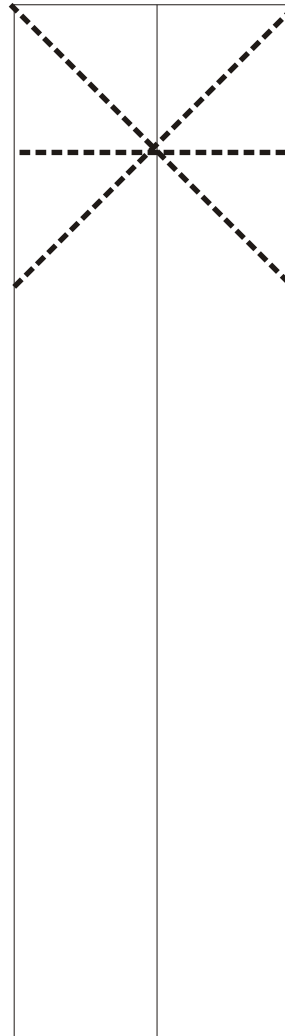




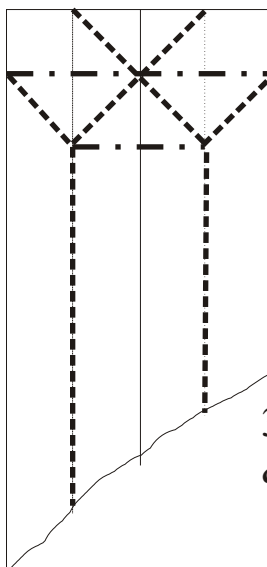
1. Fold on given lines



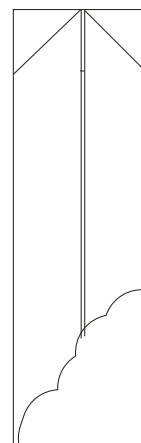
Bigger  
Diagram



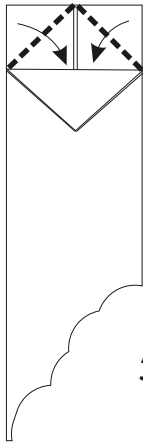
2. Fold Unfold



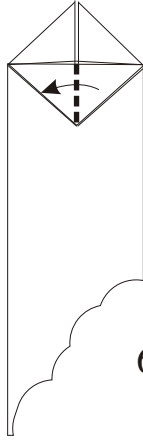
3. Unfold earlier step  
& fold on new creases



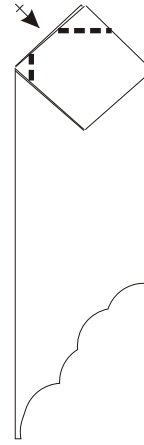
4. Turn over



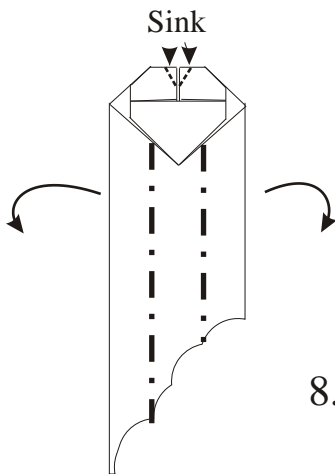
5.



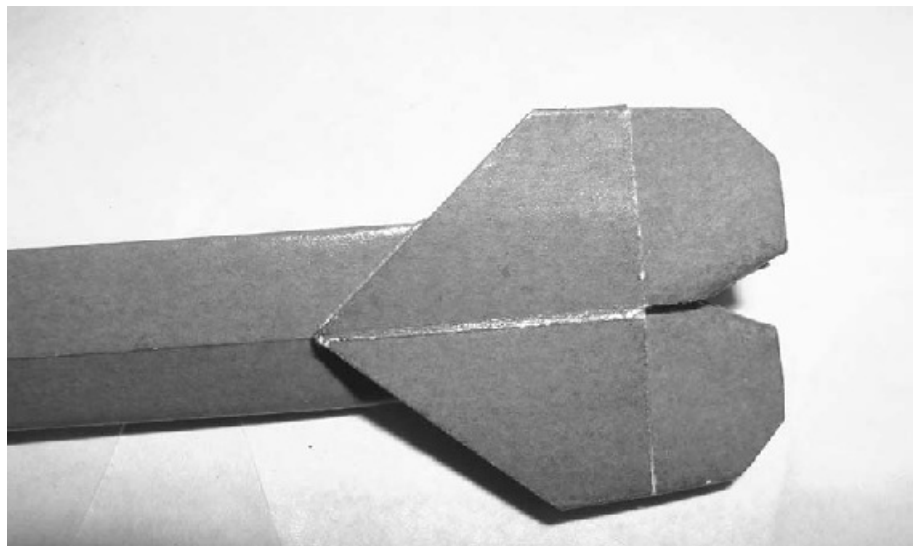
6.



7. Repeat step on other side.



8. Fold behind.



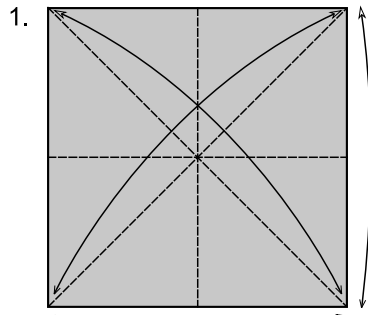
# Simple Butterfly - D0001

Designed by: Yuri Sarudiansky

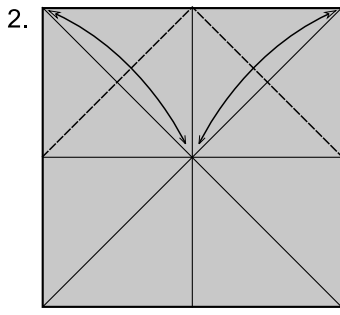
Diagrammed by: Yuri Sarudiansky (Kehom the Archer)

Designed 26/10/2006

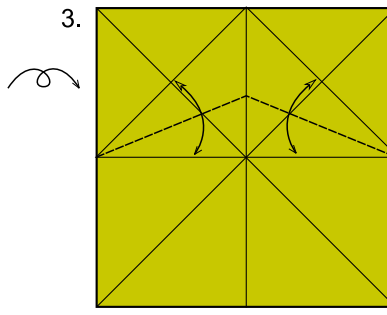
Diagrammed 02/11/2006



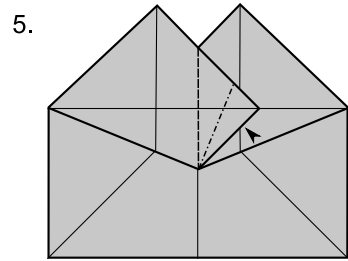
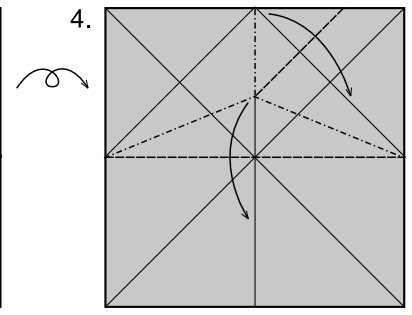
Color side down.  
Make creases.



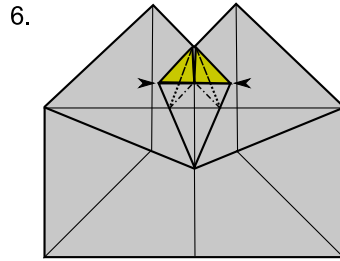
Make creases.  
Turn over.



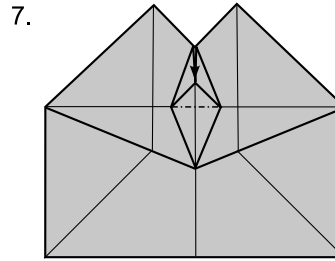
Crease along angle bissector.  
Turn over again.



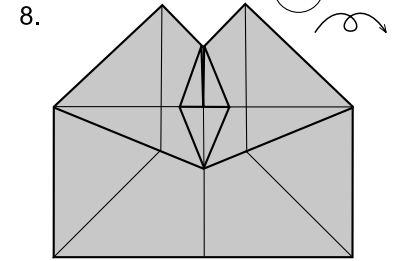
Squash fold.



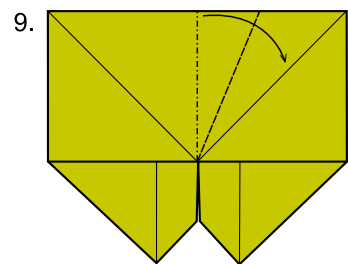
Reverse fold.



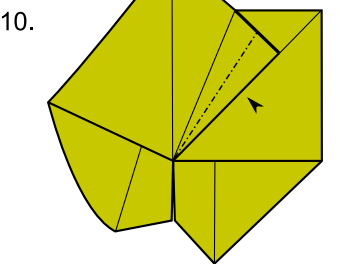
Sink.



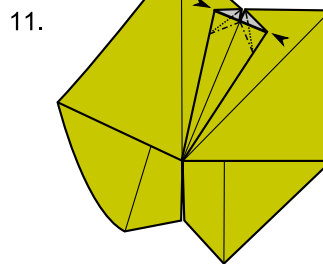
The result.  
Turn over.



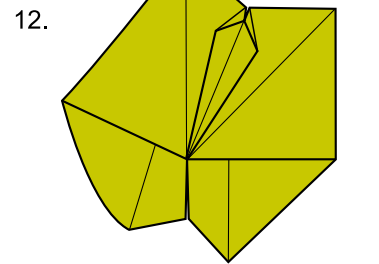
Fold only the upper layer.  
This way, model will not lie flat  
until step 14.



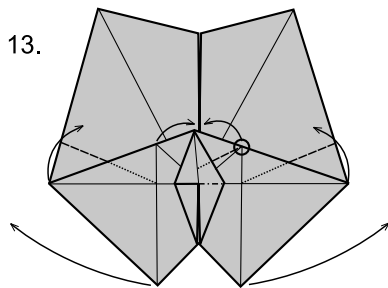
Squash fold.



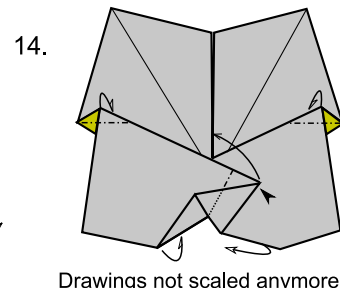
Reverse fold.



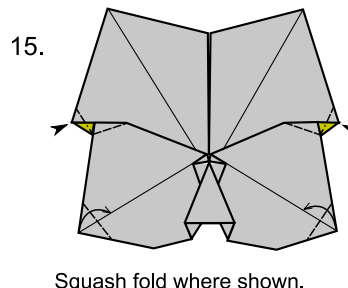
The result.  
Turn over.



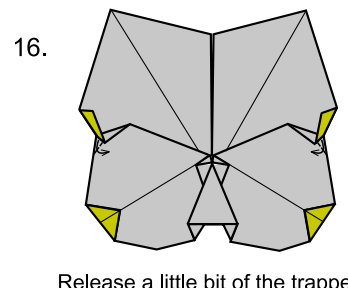
Note the x-ray. Bring landmark  
to the center line. Model will  
lie flat after this step.



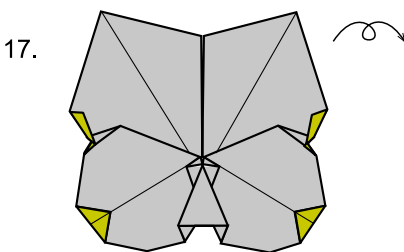
Drawings not scaled anymore.  
Some creases are not shown.  
Squash fold adjusting lower tips.



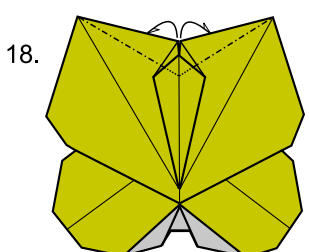
Squash fold where shown.  
Valley fold lower wings.



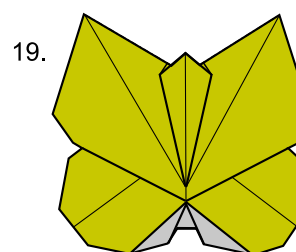
Release a little bit of the trapped  
paper to shape the wings.



The result.  
Turn over.



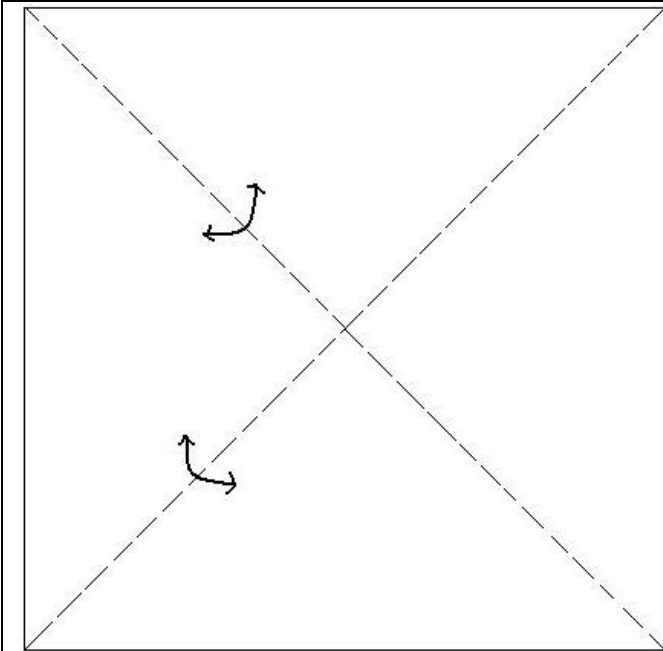
Fold the top of the wings behind  
as far as they will go. Further  
shaping to the wings as you like.



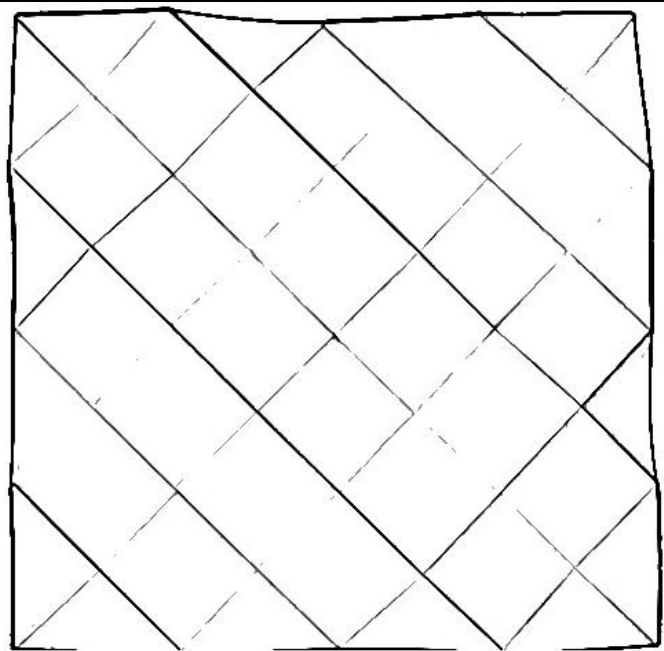
The Simple Butterfly is completed.

# SELF CLOSING BOX

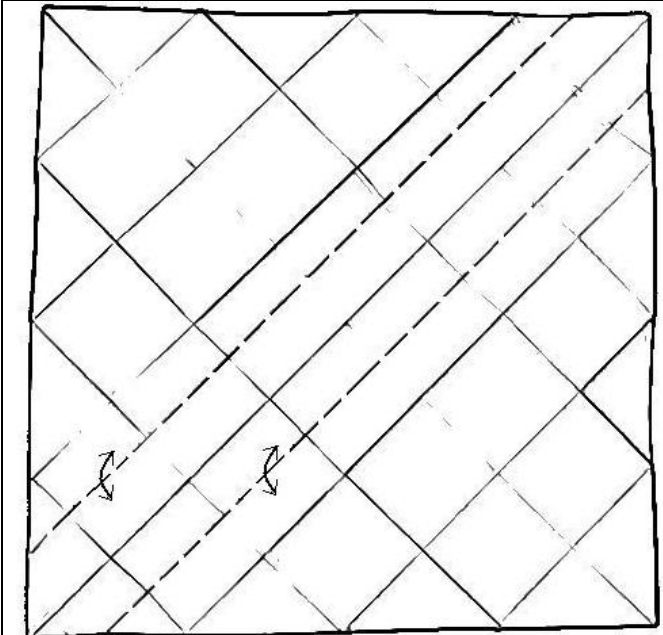
Model and diagrams by Jorge E. Jaramillo November 3, 2006



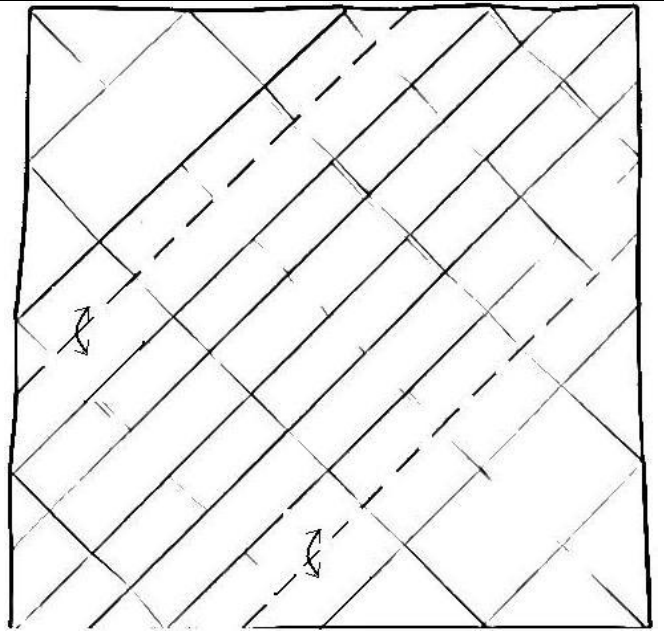
1. Start white side up. Crease the diagonals and unfold.



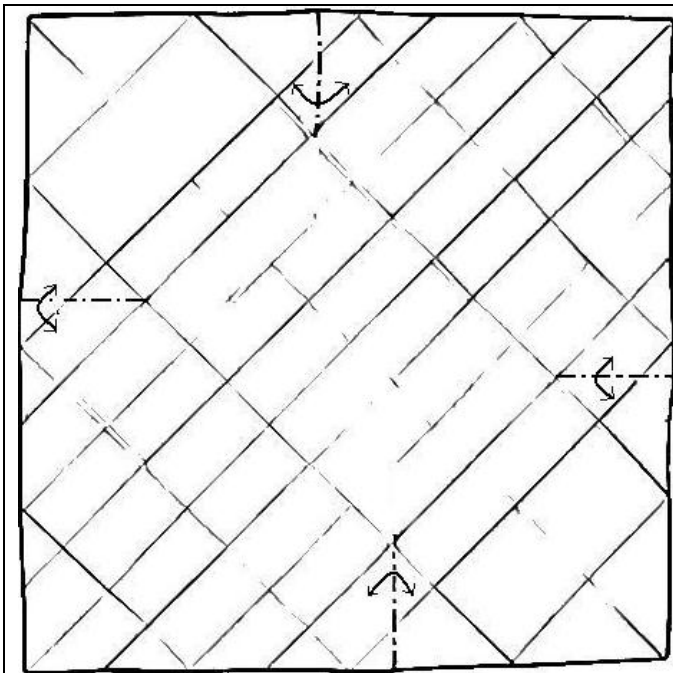
2. Make an 8 x 8 square grid along the diagonals. It is not completely necessary, but valley folds will be helpful in later steps.



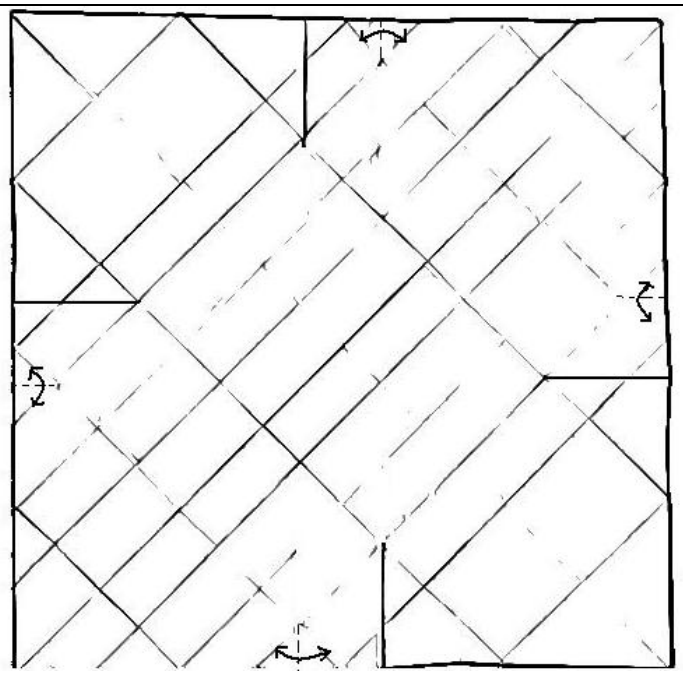
3. Make valley folds as indicated. Unfold.



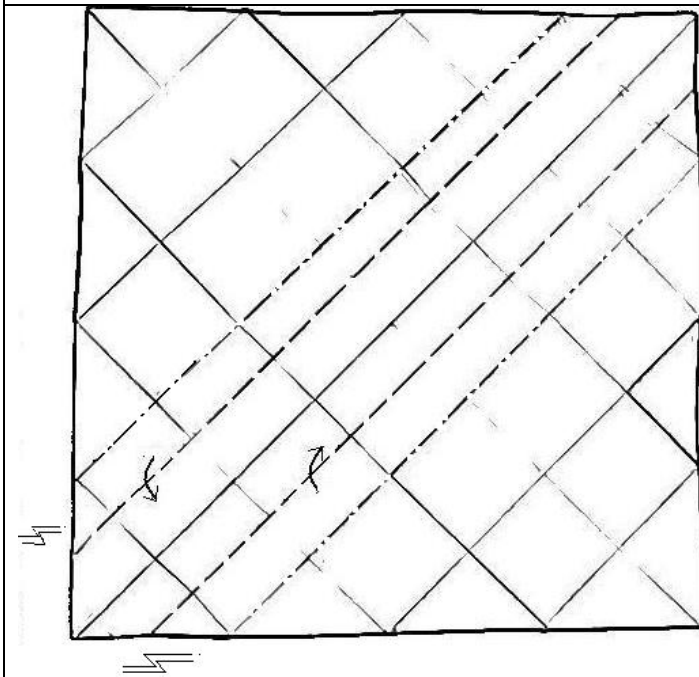
4. Make valley folds as indicated. Unfold.



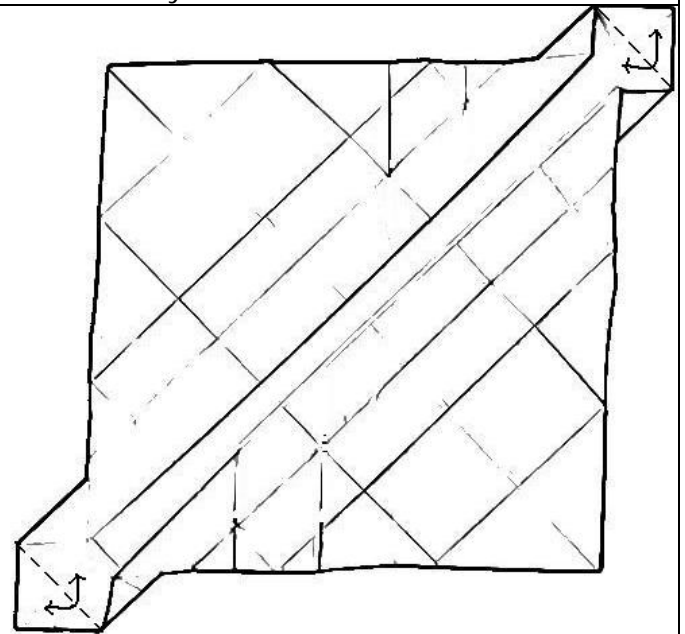
5. Make mountain folds as indicated. Unfold.



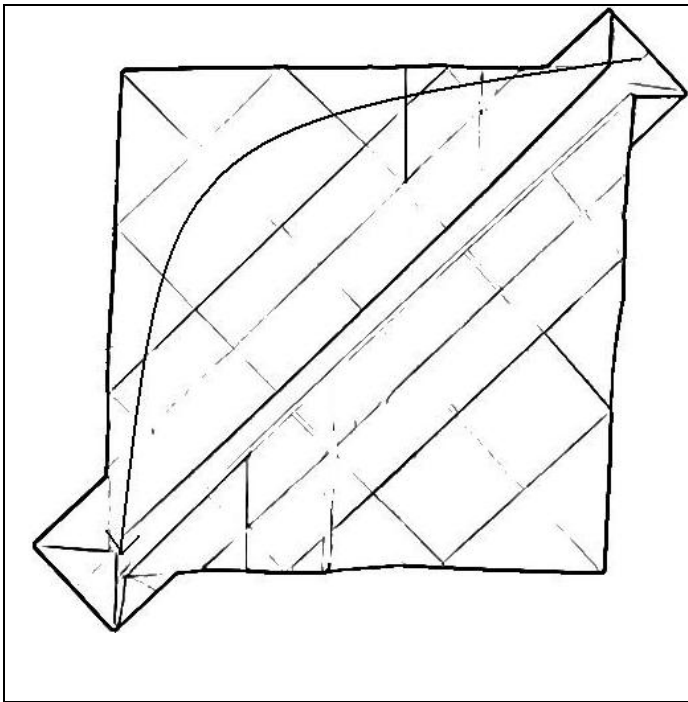
6. Make valley folds as indicated. Unfold.



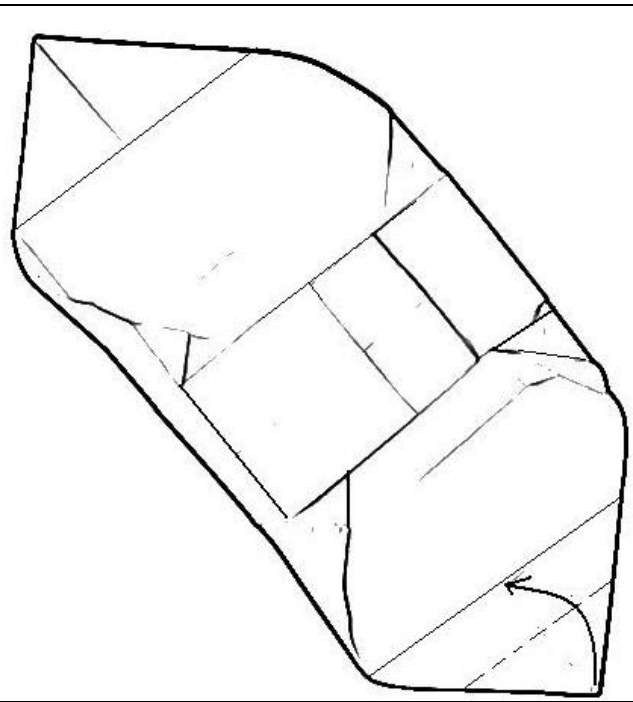
7. Pleat on both sides



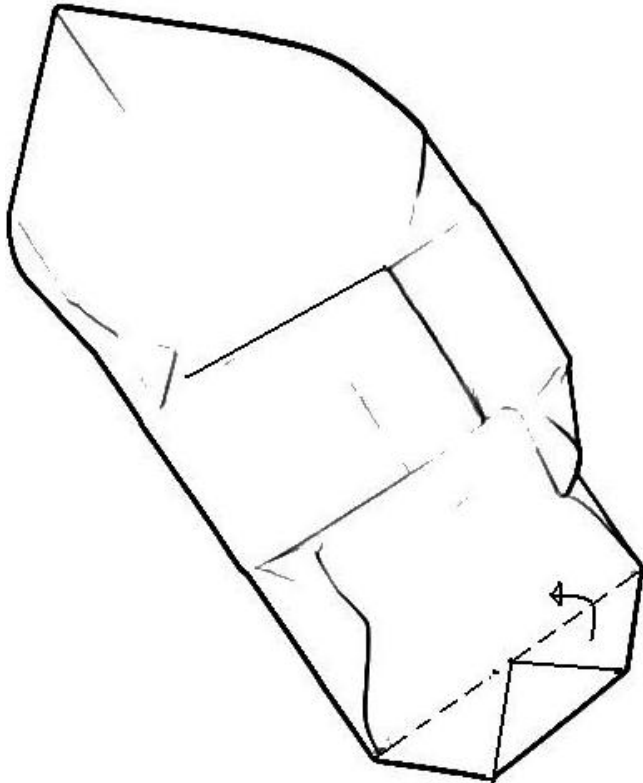
8. Make valley folds where indicated



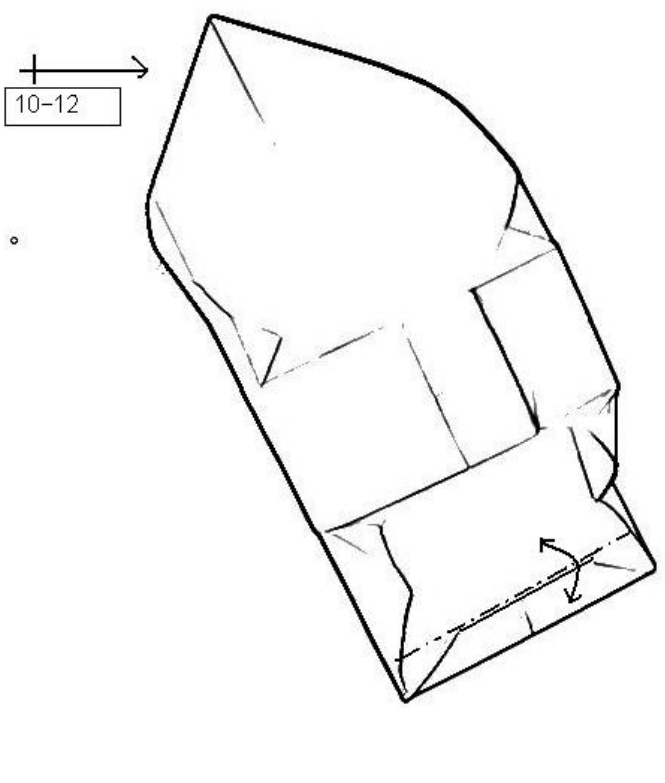
9. Insert the right hand side flap into the left hand side pocket. The model becomes 3D.



10. Valley fold tip to existing crease.



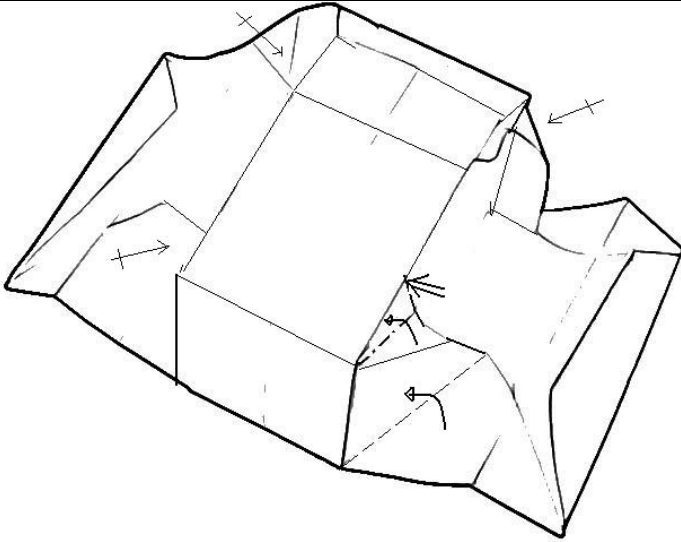
11. Valley fold on existing crease



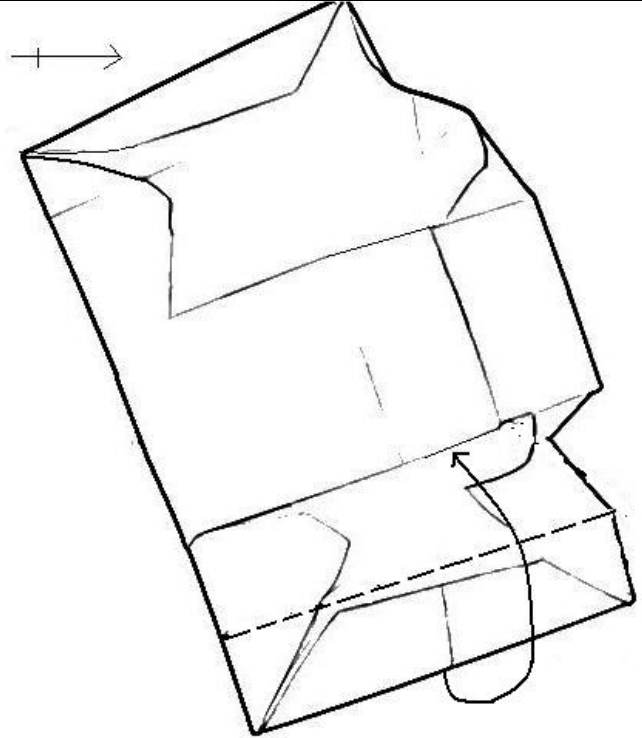
12. Mountain fold where indicated. Unfold. A valley fold would be more useful, but it would



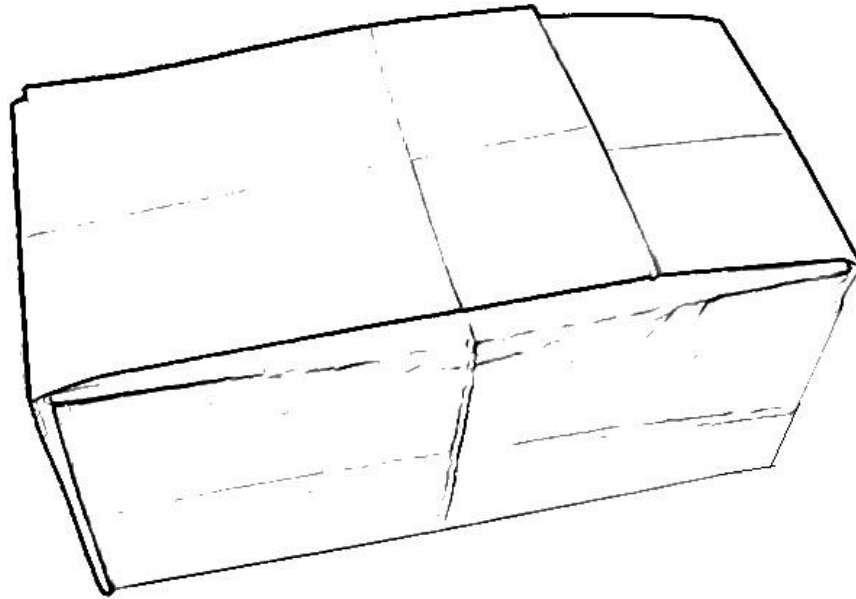
be very difficult to do at this point. Repeat steps 10-12 with the other corner.



13. Fold the little triangle in half along a previous crease. At the same time fold the large area in half along the existing crease. Put the tip of the little triangle inside the pocket. Repeat on the other 3 triangles.

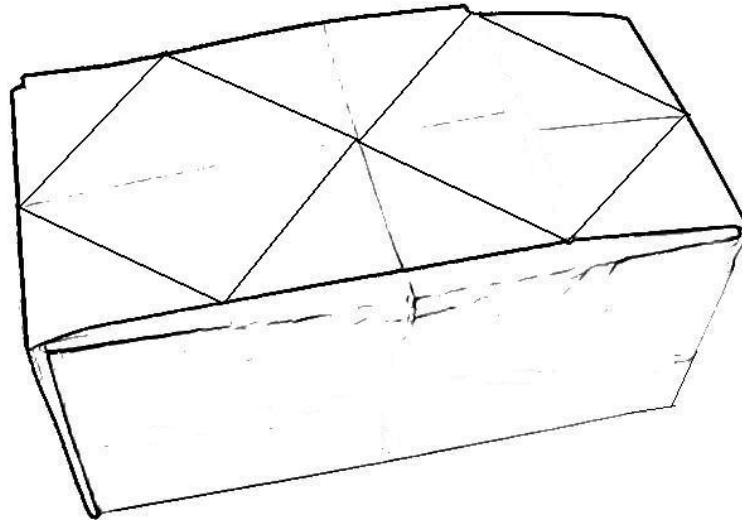


14. Valley fold the flap on existing crease from step 12 and insert it into the pocket. Repeat on the other side.



Finished model

Variation. Inserting the right hand side flap into the left hand side pocket is useful to do the steps after step 9, but keeping it so is not necessary to keep the box closed. You can remove that flap from the pocket, unfold the triangle in it and do the same on the other side and fold back each flap on existing creases. The result would be:



This model can be unfolded with a single pull of both flaps, to reveal whatever you might have put inside the box.

These are not professional looking diagrams but they capture the basics of the steps. They were made on the same day I created this model and they took me less than two hours. They are intended to show the benefits of using a simple diagramming tool. The process consists of taking pictures of the folding process and then turning them into diagramming pictures using an imaging processing software that is freely available. The program is called "Kodak Easy Share" and can be downloaded from <http://www.kodak.com> Go to Downloads and Drives and you'll find it. After having installed it, you just import the images you've taken of your folding process into the program. Select a picture and click on "Funny Effects" (this is my best guess of what it might be called, because the one I have installed is in Spanish). And then apply the effect known as "Coloring Book" (again I am guessing the name).

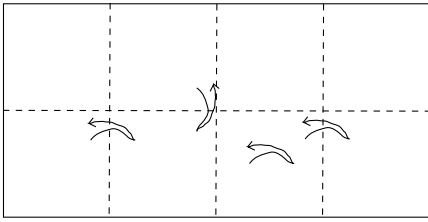
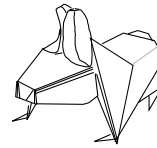
The software produces an image that contains the main lines on your original picture as if you were going to color the empty space between them. Save that new image and you'll have your diagrams. You will still need to add arrows and other signs but you will be very close to the finished thing.

Other imaging packages also have this feature. I am aware then Photoshop has a feature they call "Stamp" that produces the same results.

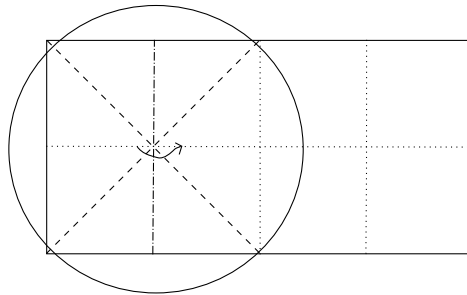
I encourage creators to give this method a try.

# Rabbit

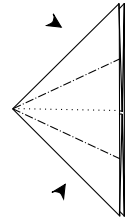
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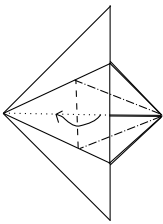
1. Start with a 2:1 rectangle, white side up. Fold as shown.



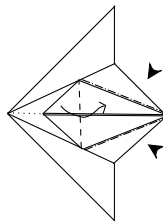
2. Fold a water bomb base at one end. The next few steps will show only the making of the head.



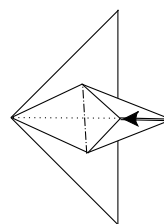
3. Inside reverse fold the sides into the center.



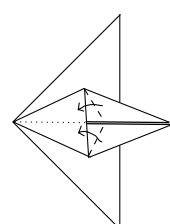
4. Petal fold the front flap.



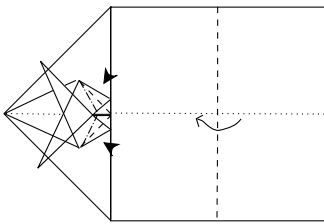
5. Inside reverse fold two flaps and fold down the top flap.



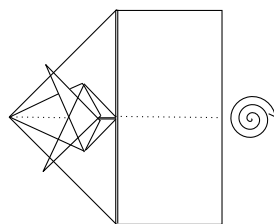
6. Push the tip inside the model.



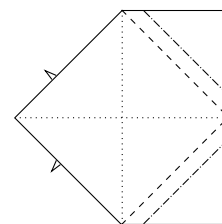
7. Fold the ears up as far as possible. They will overlap. Now for the rest of the body.



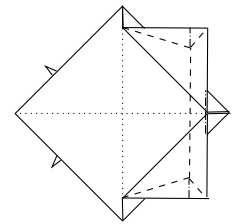
8. Inside reverse fold the two flaps behind the ears and fold the back flap up to the head.



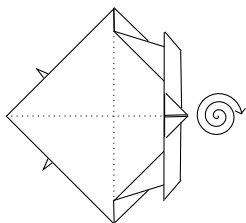
9. Result. Flip over.



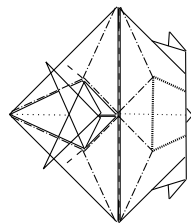
10. Crimp the corner flaps.



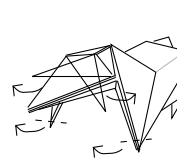
11. Rabbit ear the feet while forming the tail with a crimp.



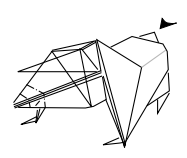
12. Result. Flip over.



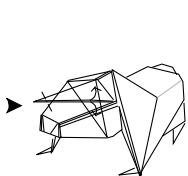
13. Do a series of mountain and valley folds to make the model 3D. the soft lines should form on their own.



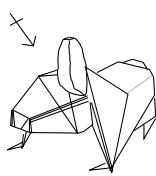
14. Fold front feet forward to lock front legs. Widen cheeks.



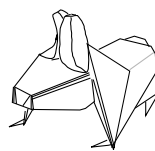
15. Form the nose with a mountain fold and a crimp. Push the tail to make it 3D



16. Open up ear. Push the tip.



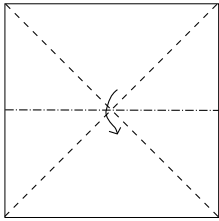
17. Repeat on other side.



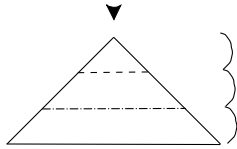
18. Enjoy :)

# Man

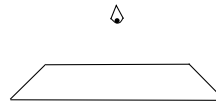
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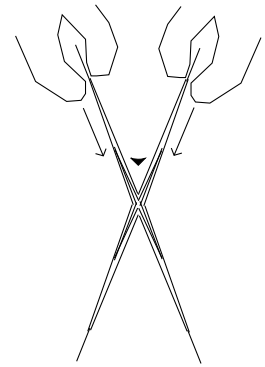
1. Start by with a square, white side up. Fold a water bomb base.



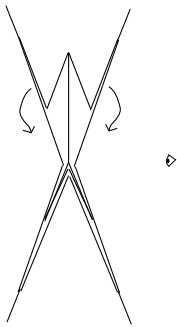
2. Sink the top of the water bomb base twice.



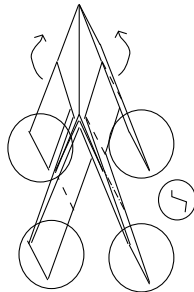
3. View the model from the top



4. Hold the arms and push in. At the same time, push in the back.

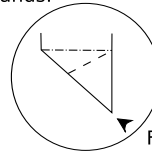


5. Fold the arms down. View the model from slightly to the side.

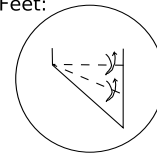


6. Fold the legs into place. Fold the arms back up so that they rest horizontally. View the hands and feet.

Hands:

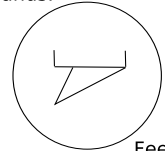


Feet:

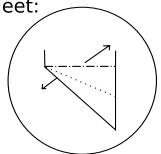


7. Foot fold the hands forward. Precrease the feet.

Hands:

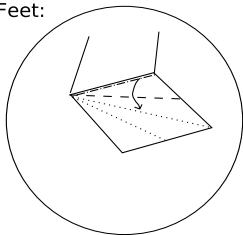


Feet:



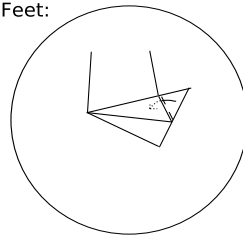
8. Result of the hands. Open up the feet using the precrease. View only the feet.

Feet:

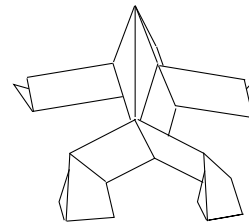


9. Pleat the feet to the center, using the precrease.

Feet:



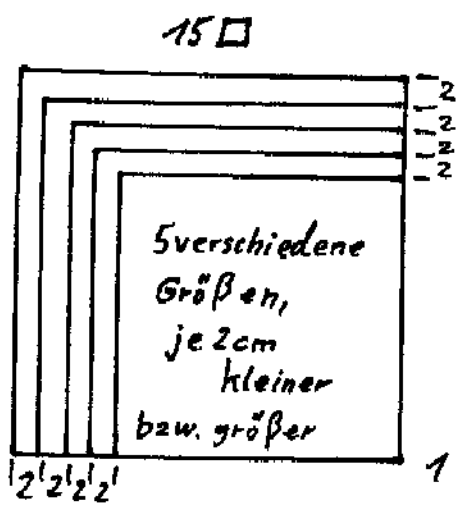
10. To lock the pleat, fold the flap inside the foot. Go back to view the full model.



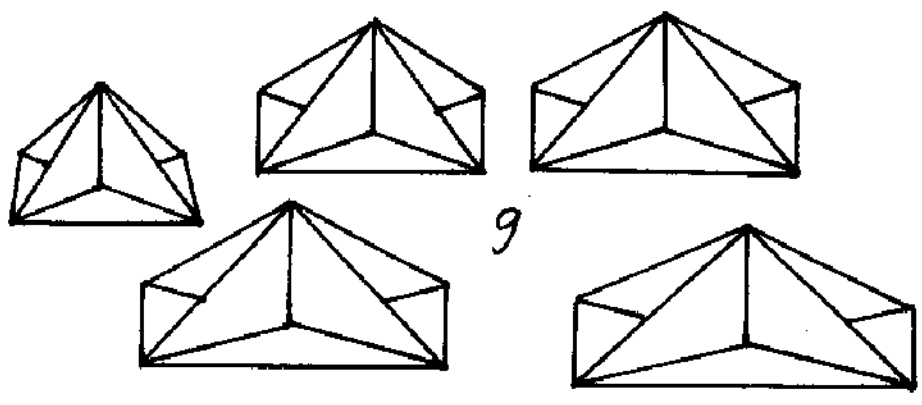
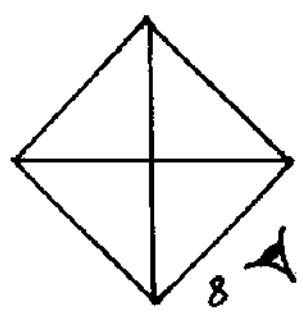
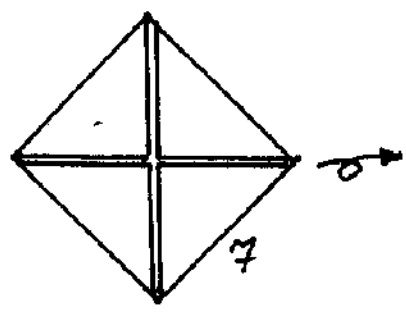
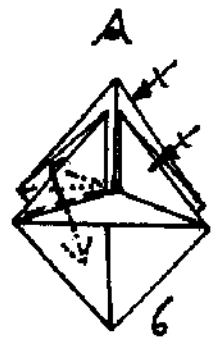
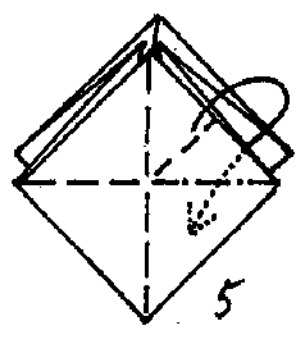
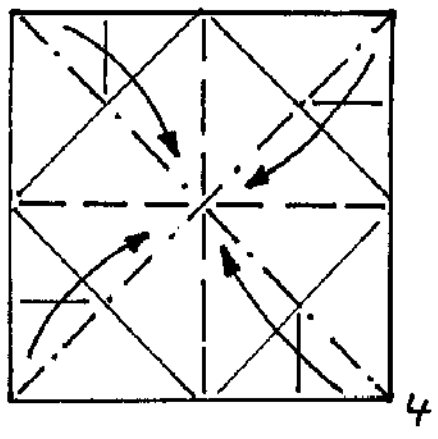
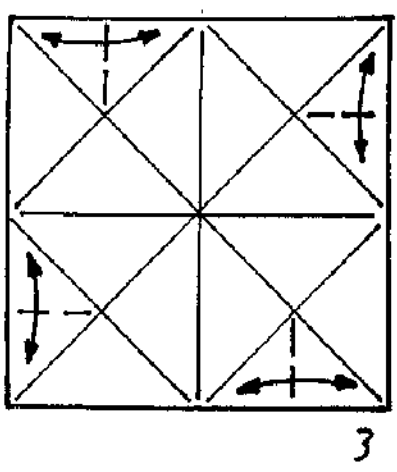
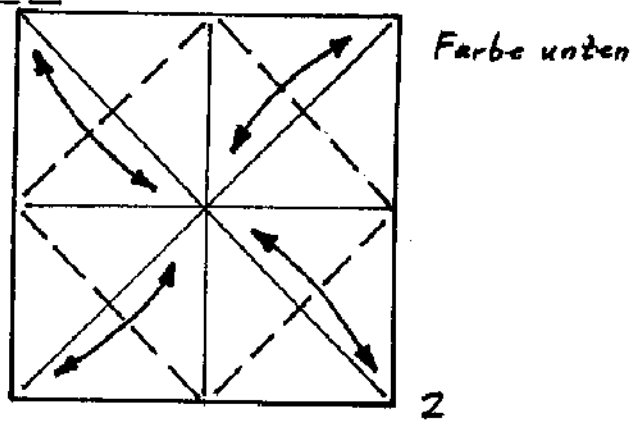
11. Finished man. Pull arms to transform into "Box Man"

See if you can open up the back of the head and petal fold to make a better head. Also, try folding this out of a 2:1 recatngle to make a table. Enjoy! :)

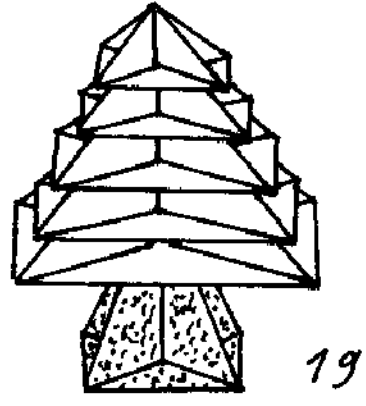
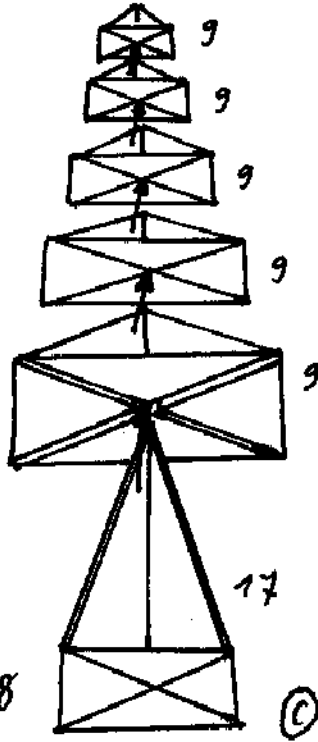
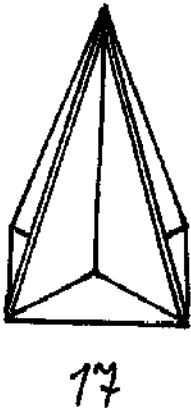
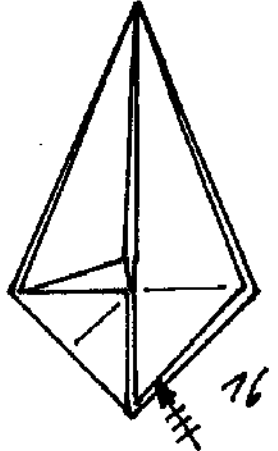
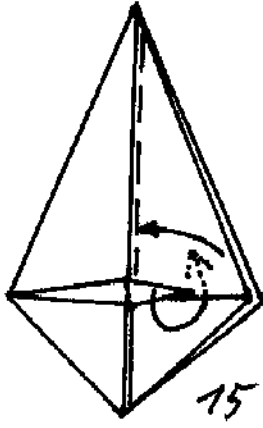
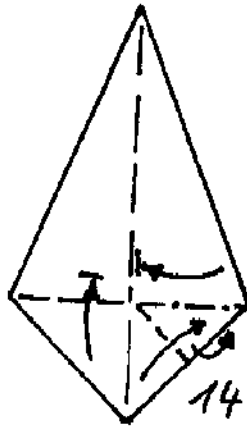
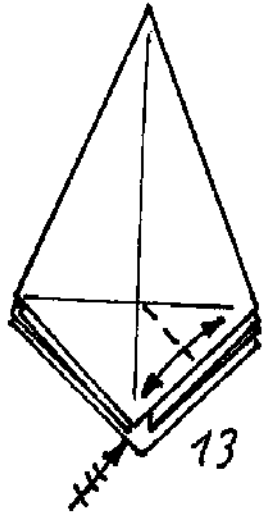
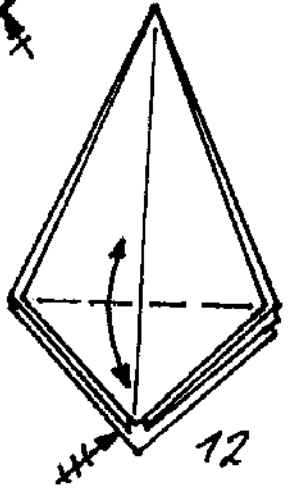
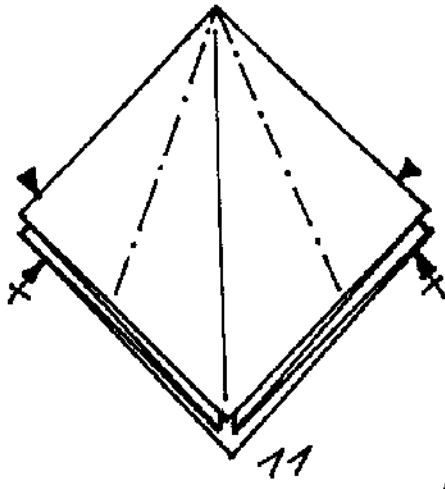
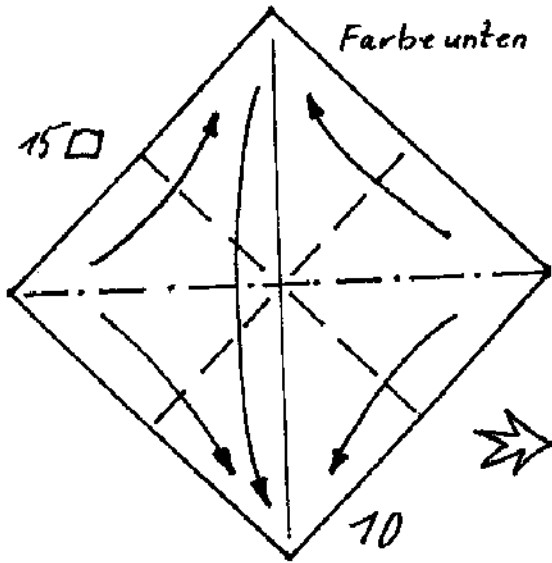
# Der Eckardtsheimer Tannenbaum: von Klaus-Dieter Ennen



## Baumkrone:

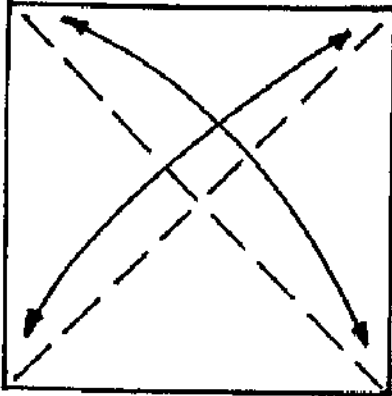


Stamm:

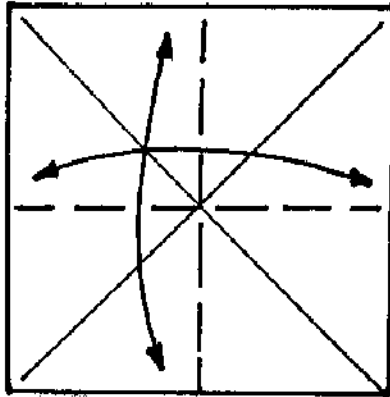


Der Stern vom Eckardtsheimer Tannenbaum: von Klaus-Dieter Ennen

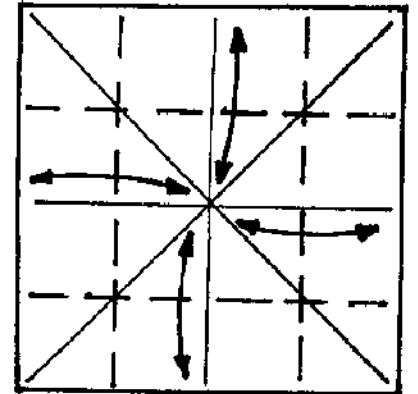
7 □ Farbeunten



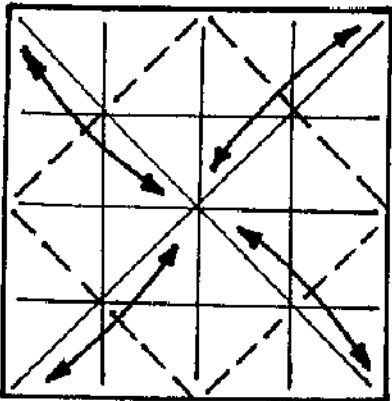
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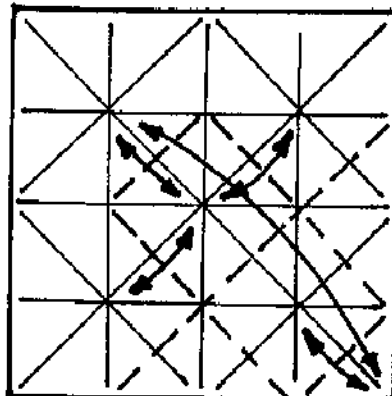
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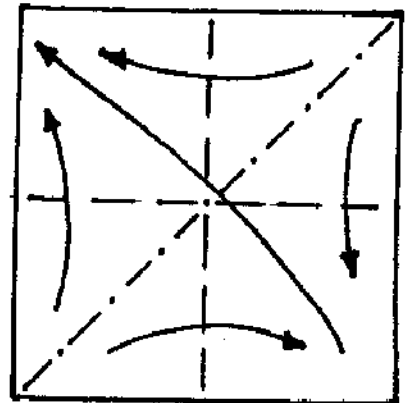
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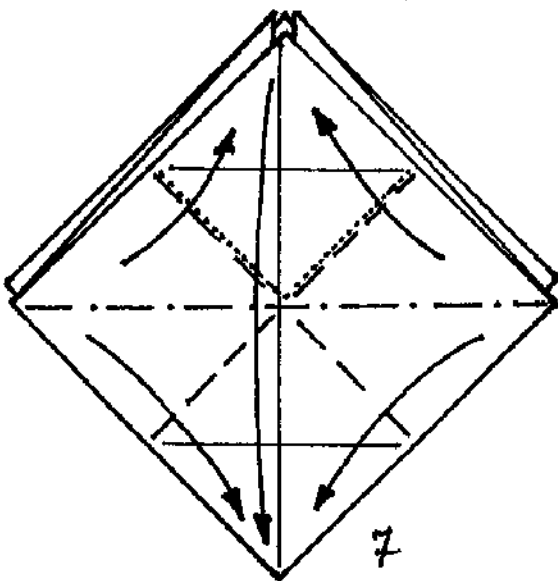
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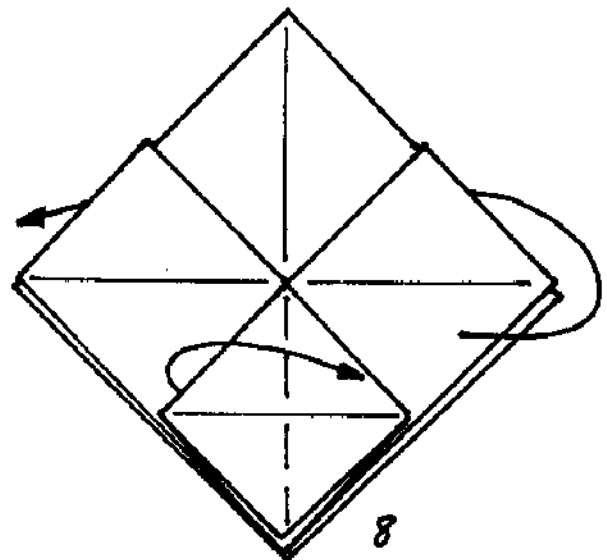
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6 →

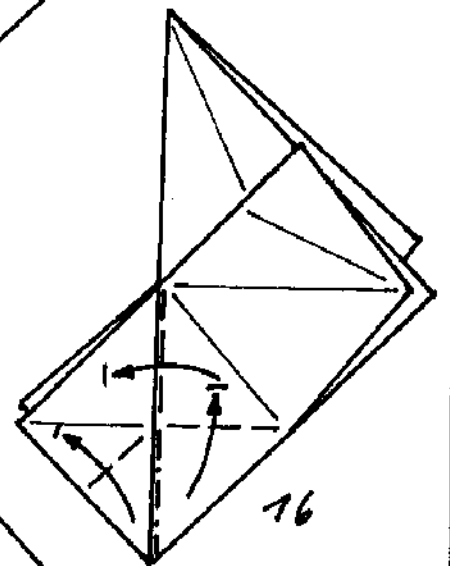
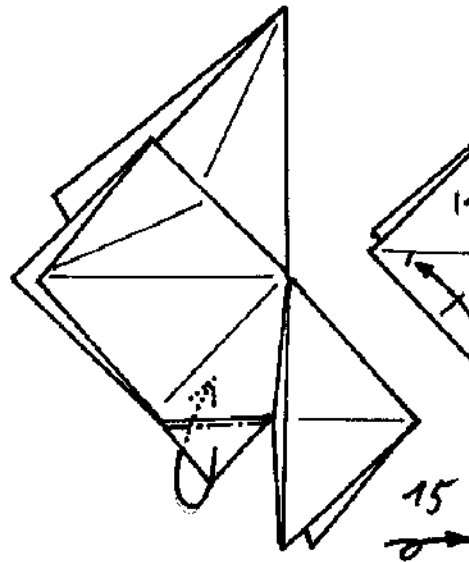
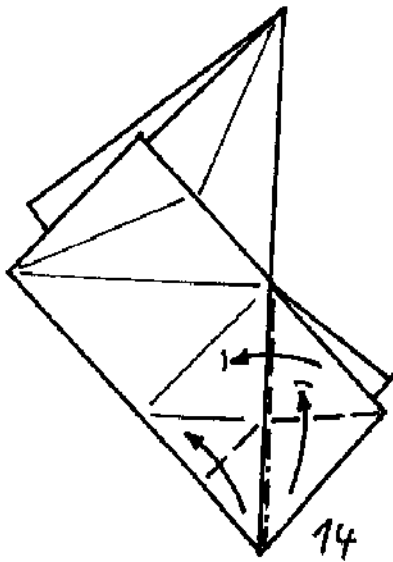
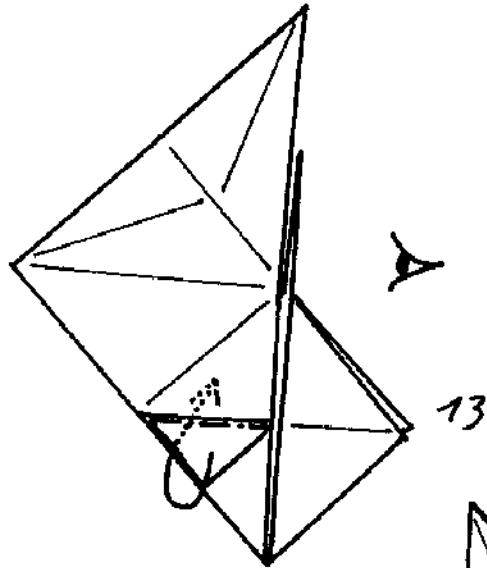
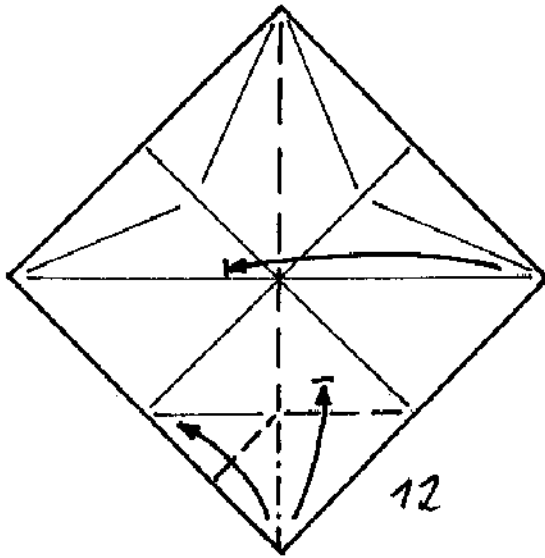
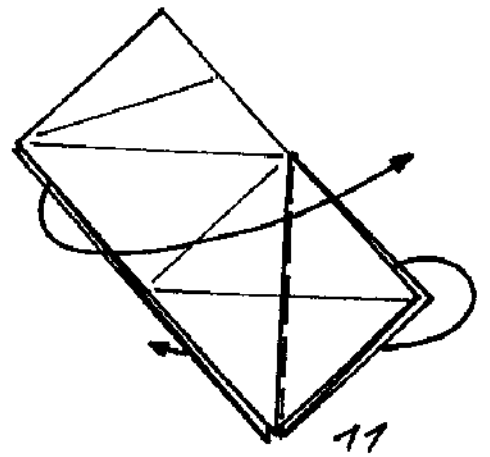
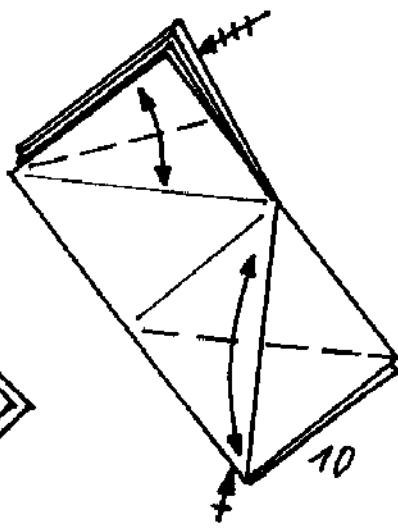
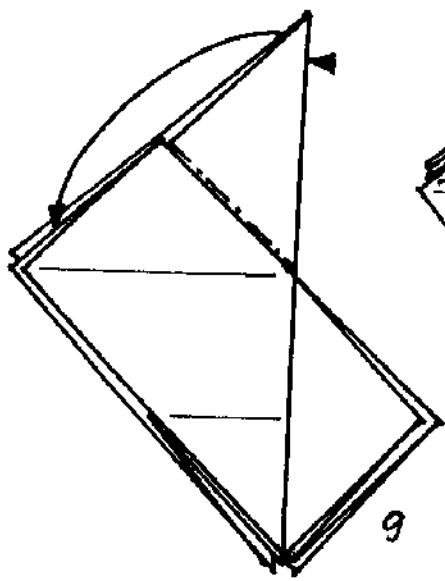


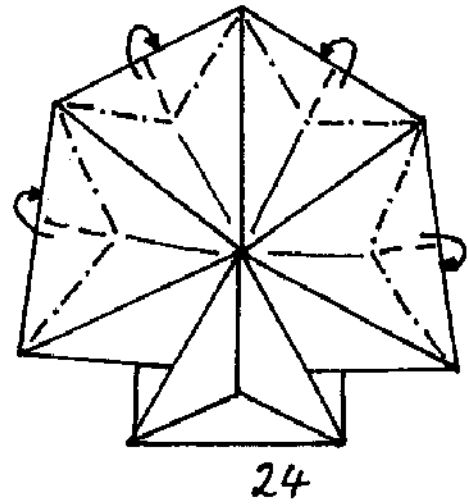
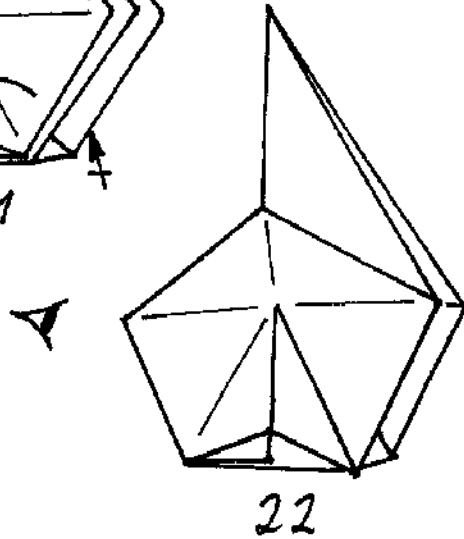
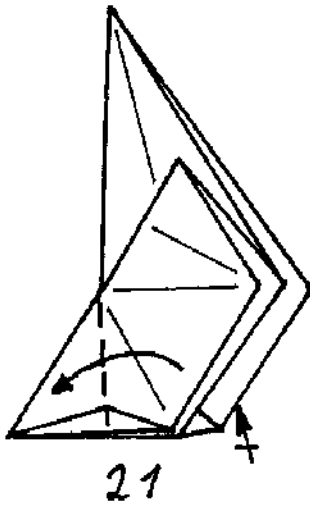
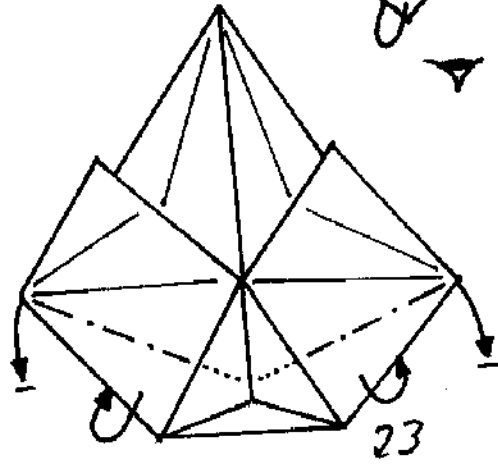
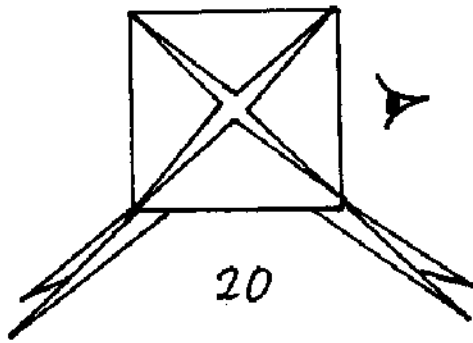
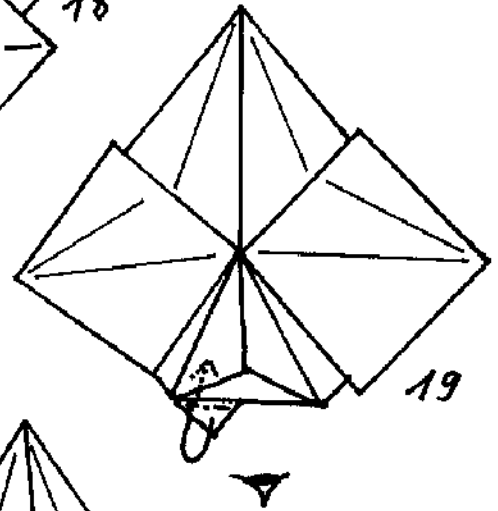
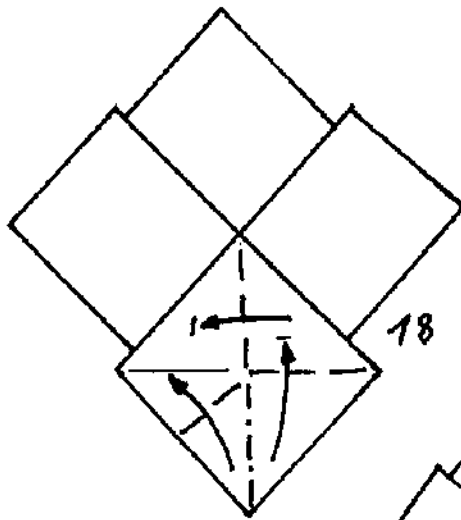
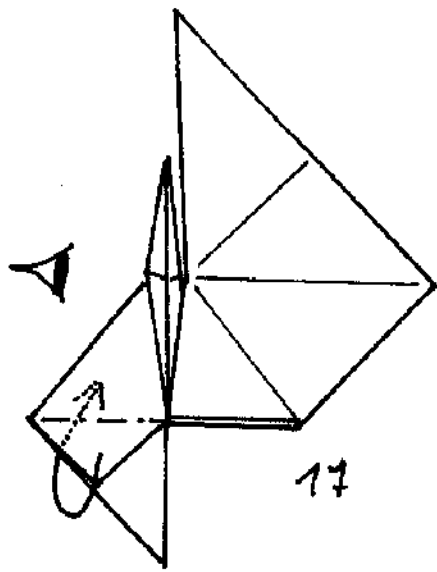
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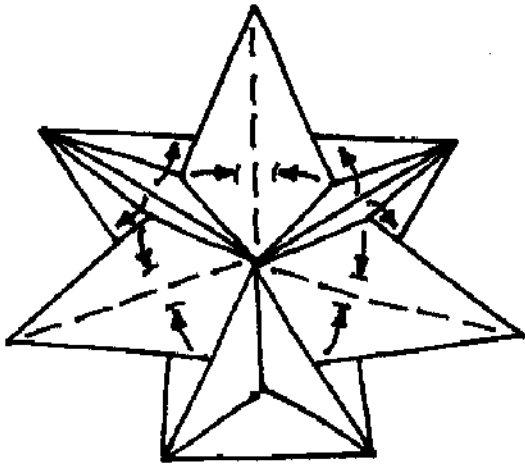


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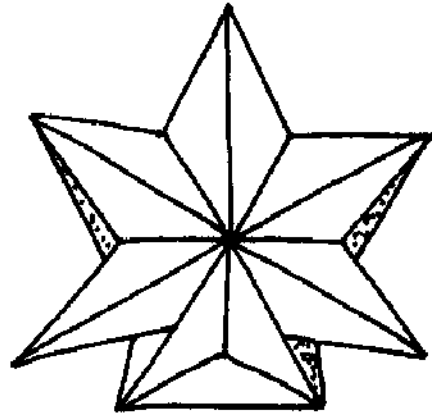




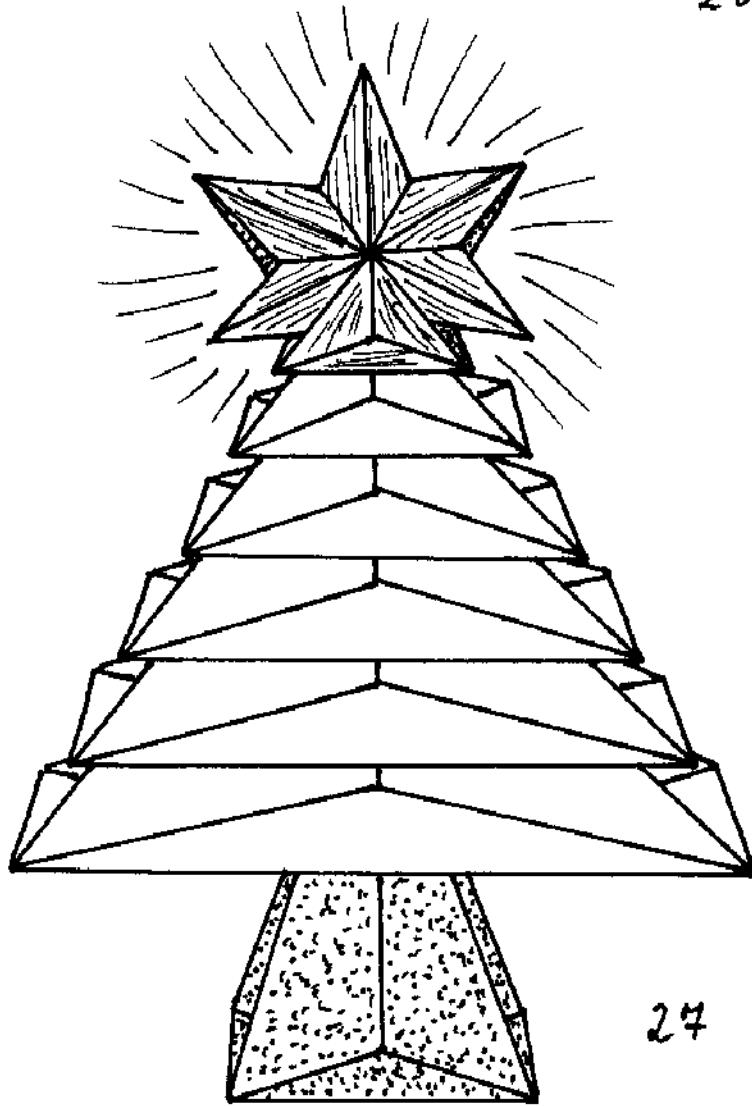




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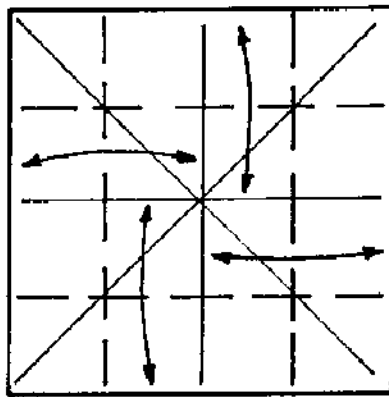


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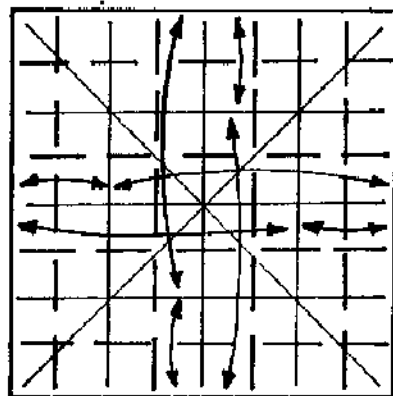


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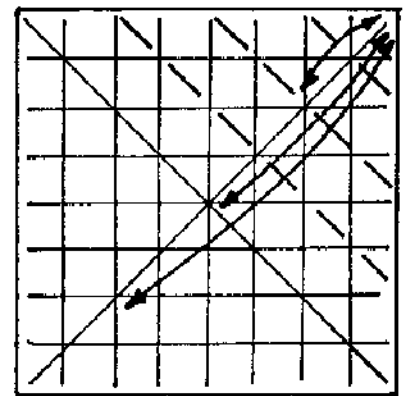
Weihnachtsstern 2003: von Klaus-Dieter Ennen



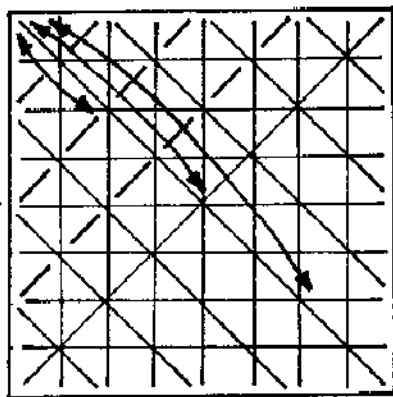
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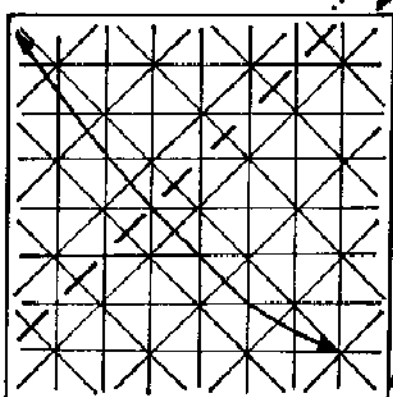
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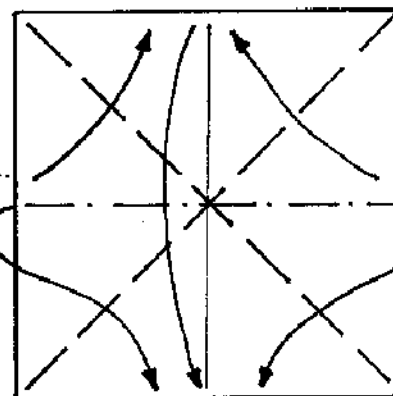
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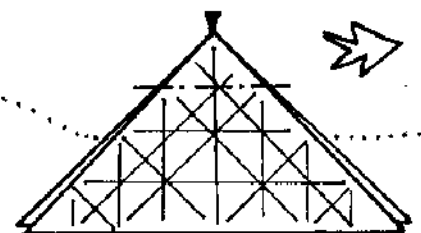
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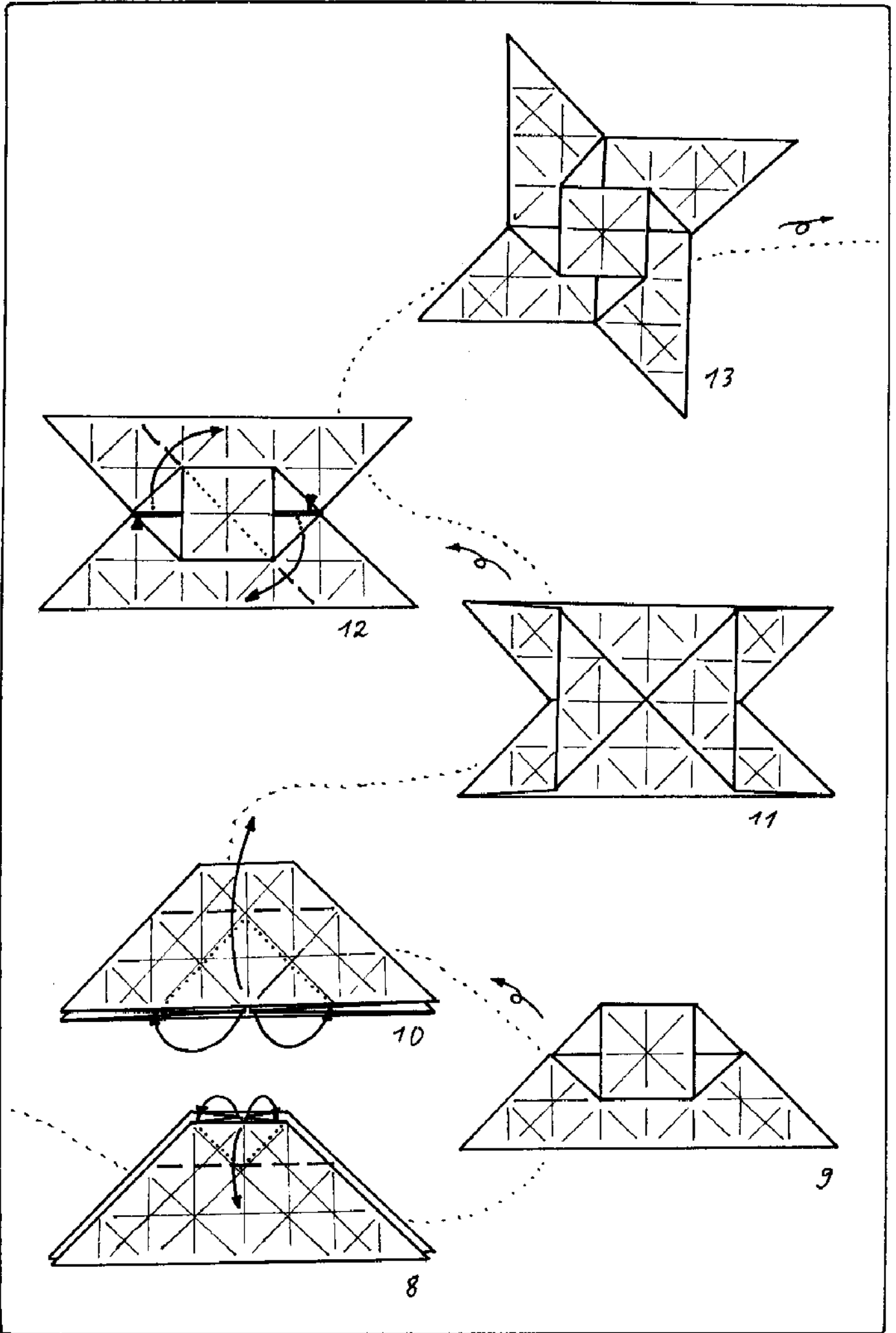
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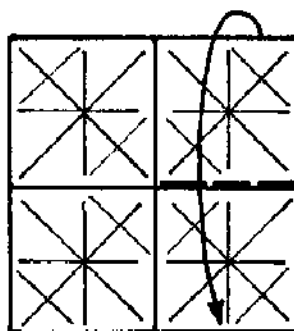
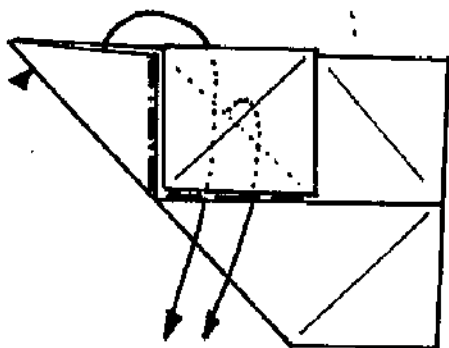
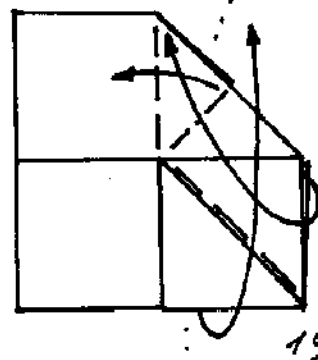
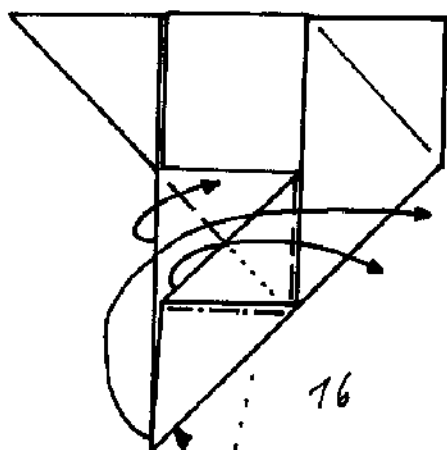
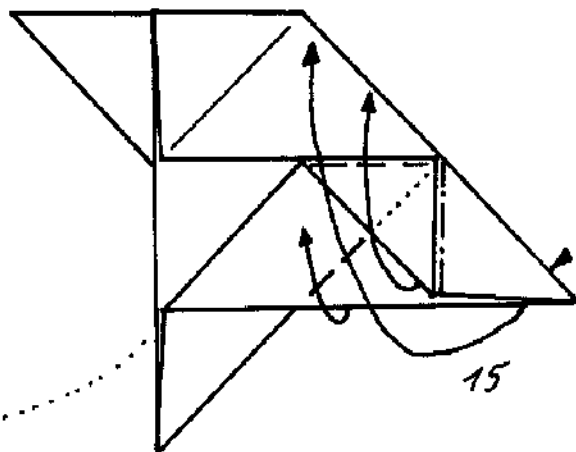
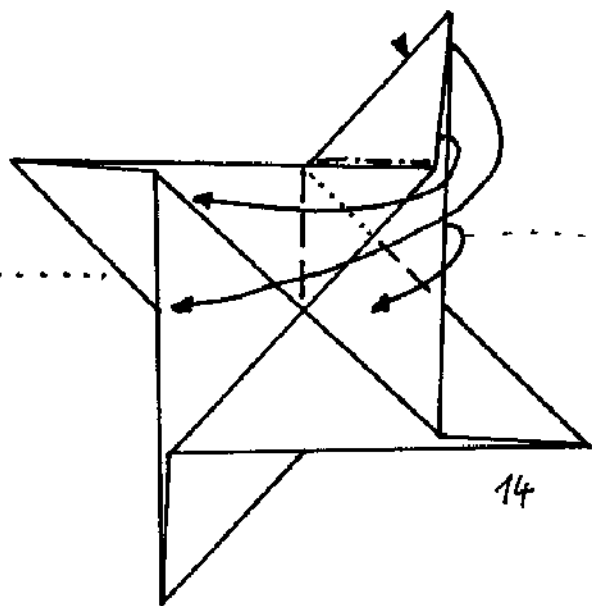


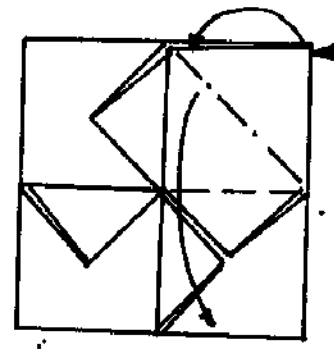
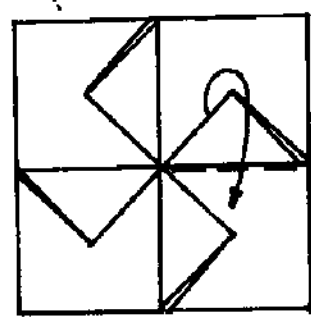
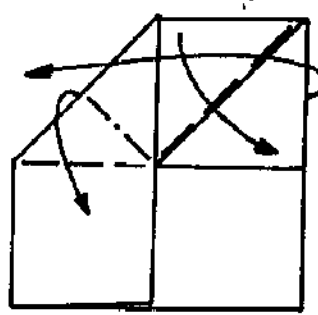
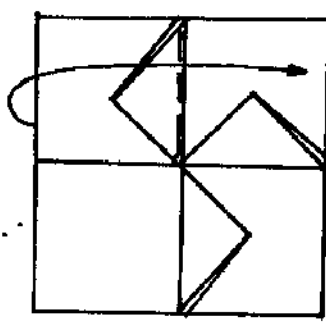
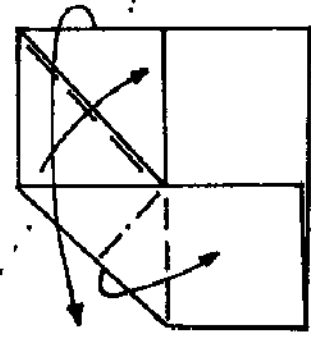
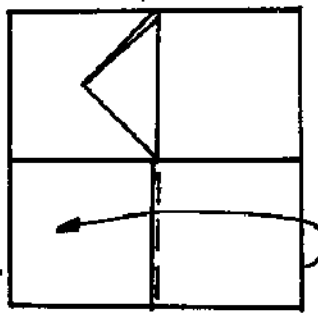
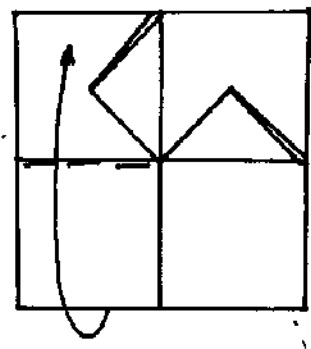
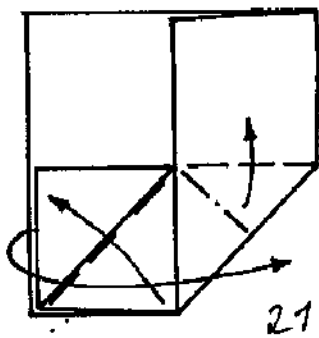
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7







21

22

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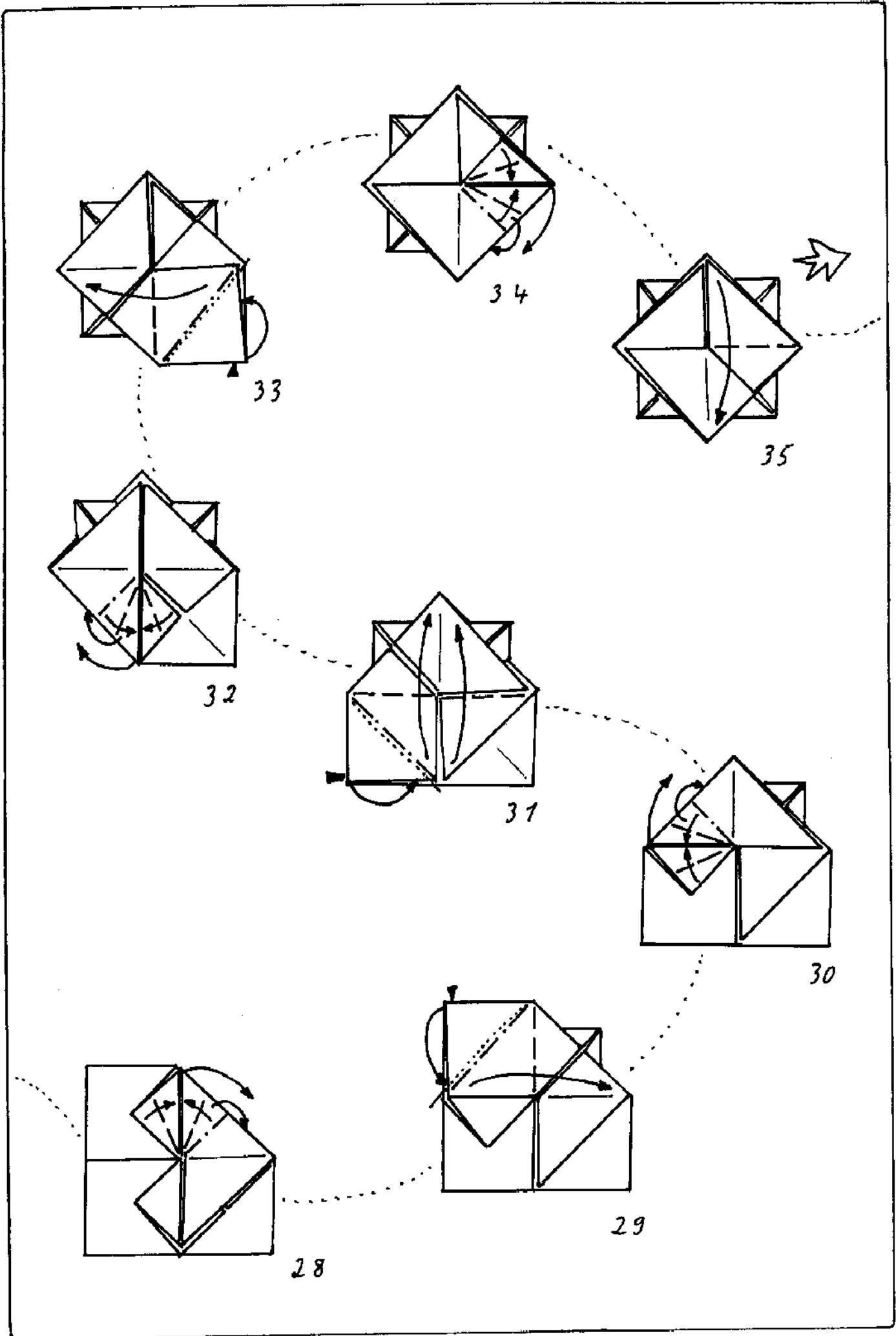
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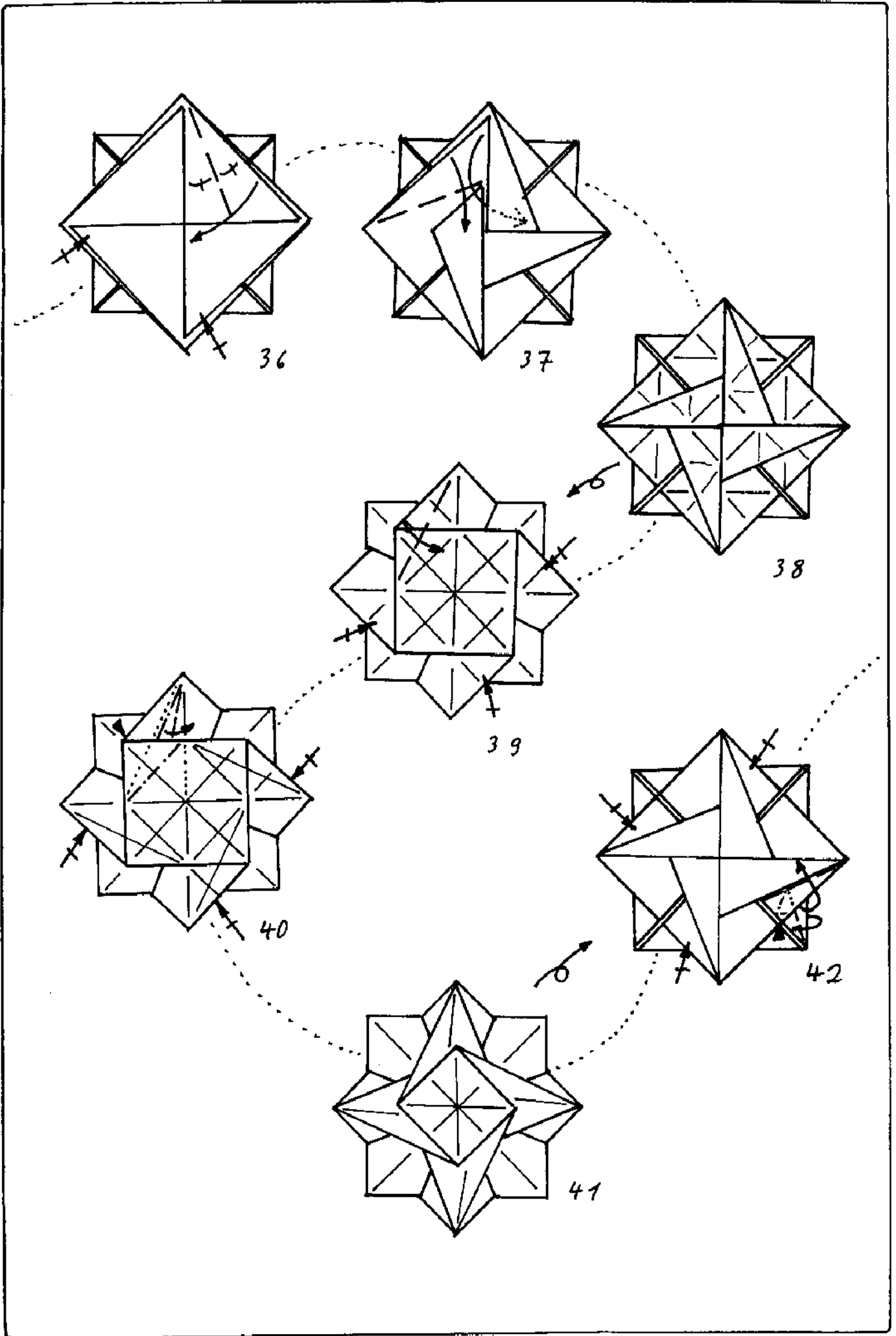
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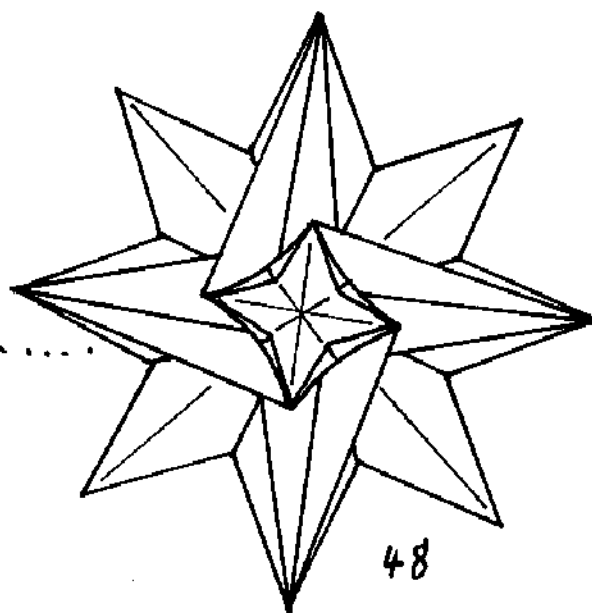
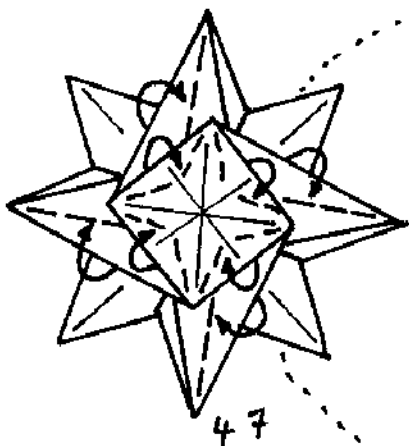
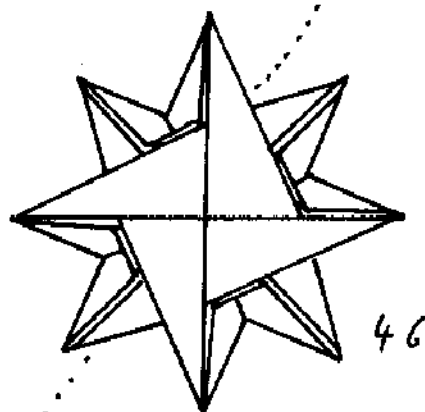
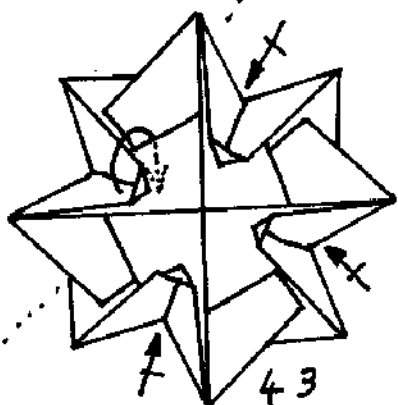
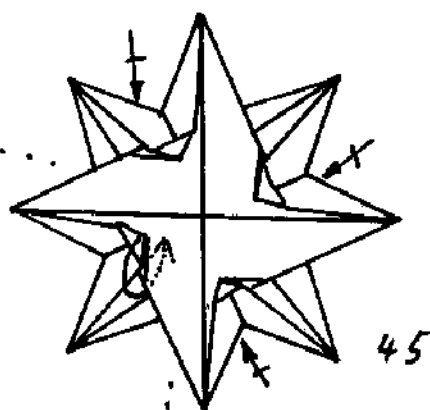
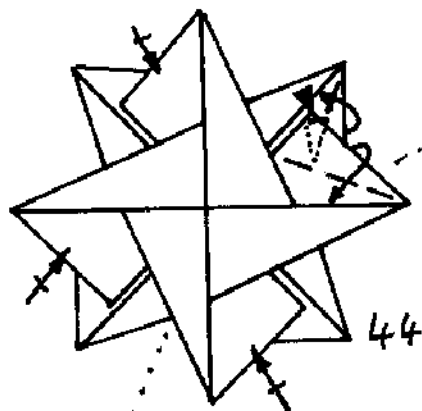
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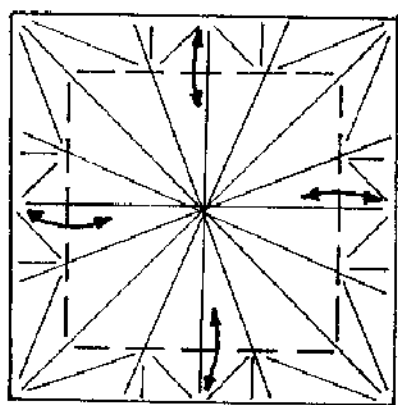
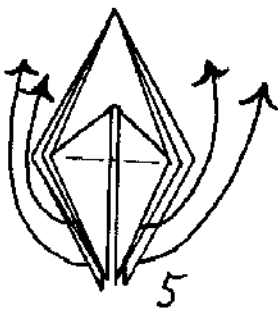
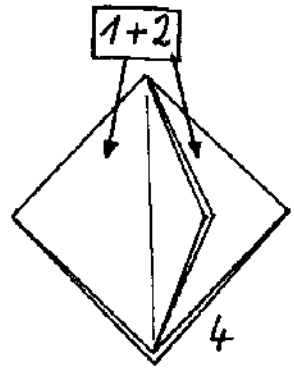
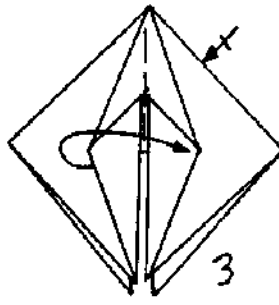
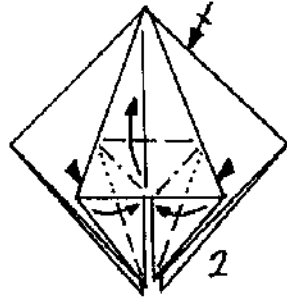
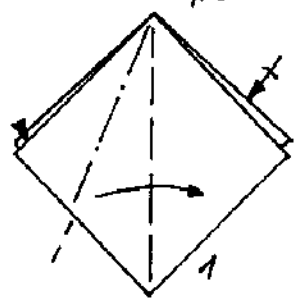




Blumentopf: von Klaus-Dieter Ennen

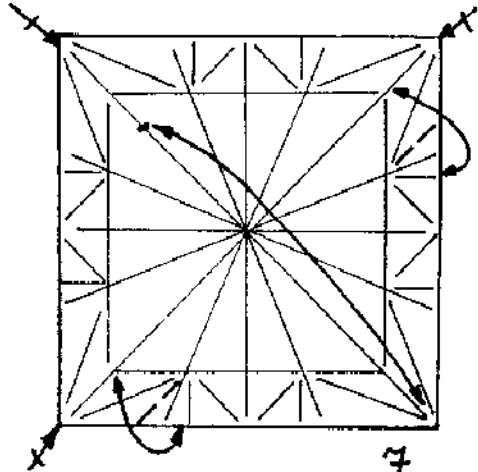
a) Blüten: 4x □ Doppel-Color 12x12

Farbe außen

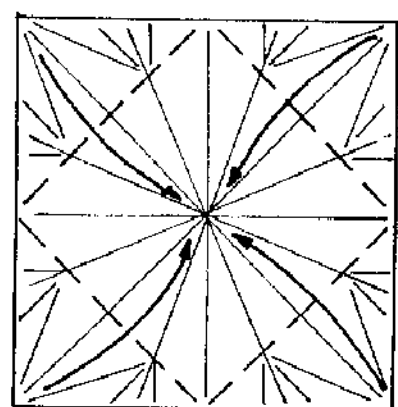


Farbe oben

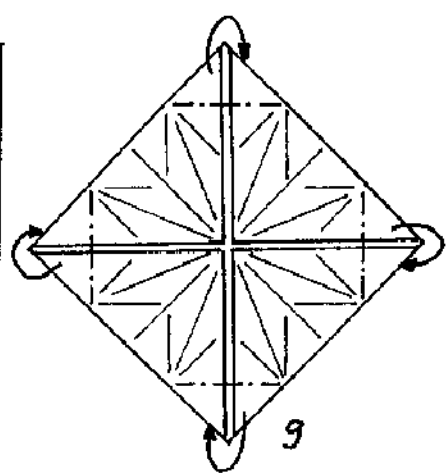
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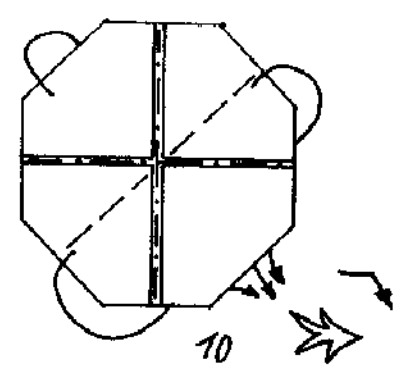
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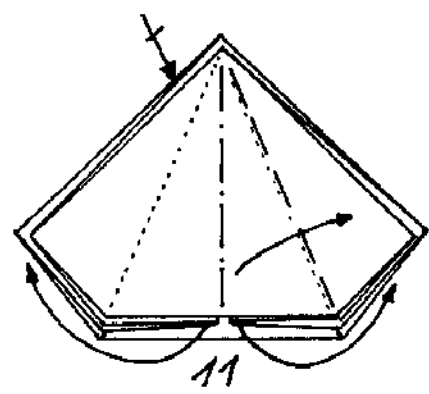
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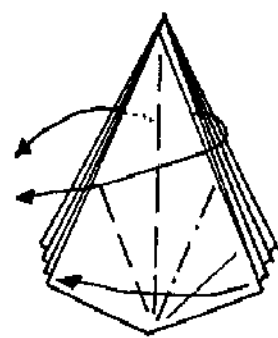
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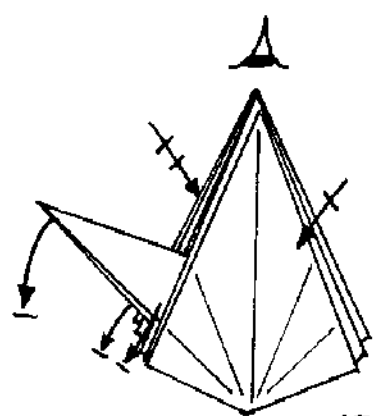
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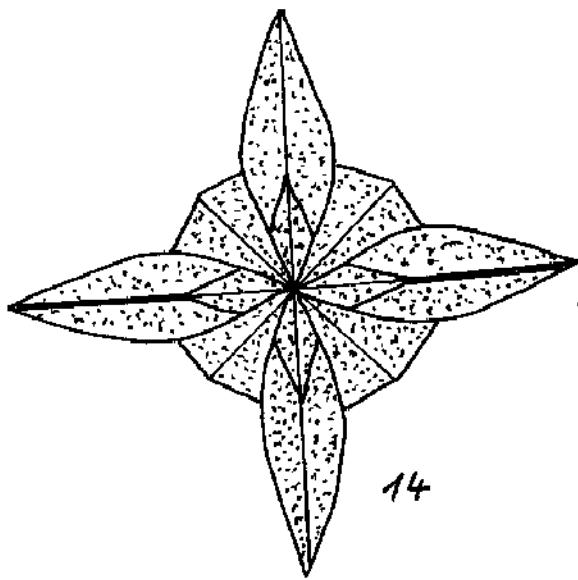
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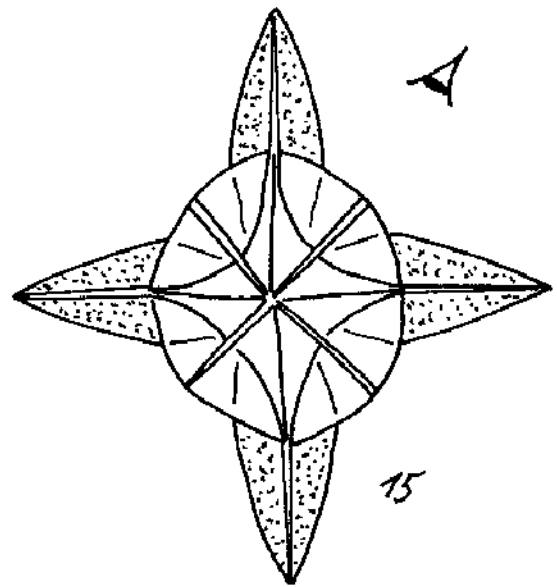
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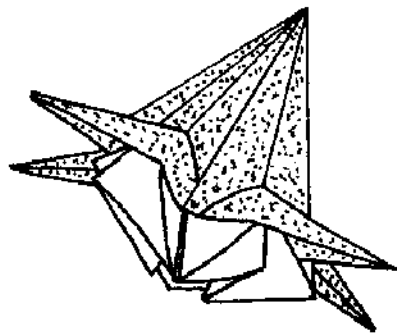
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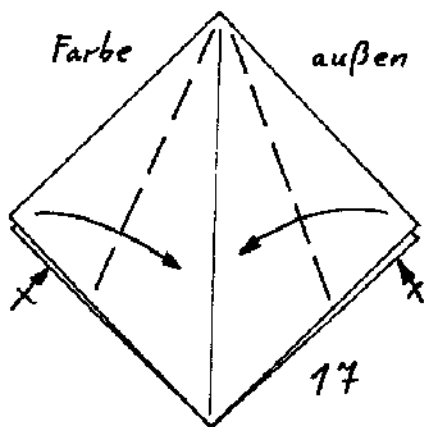
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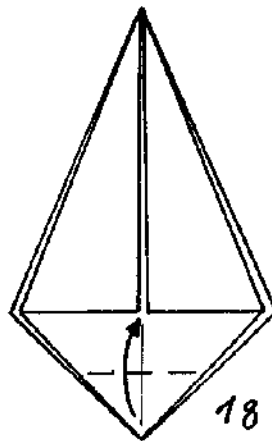
16

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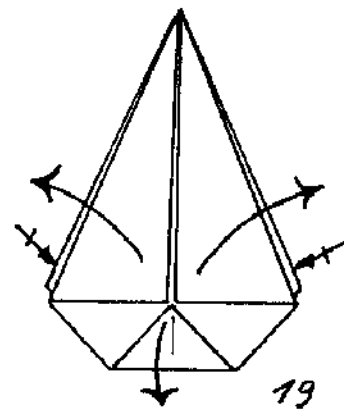
b) Stengel: □ 15x15



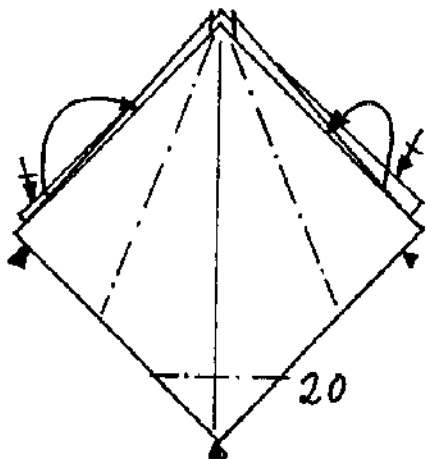
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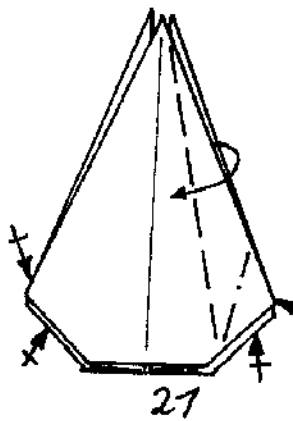
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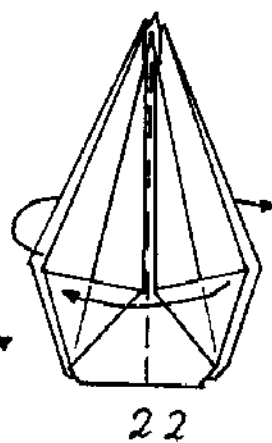
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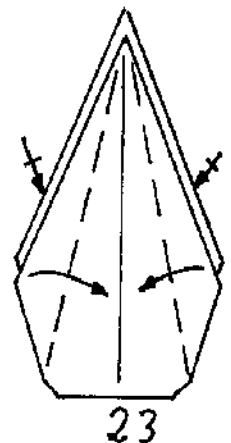
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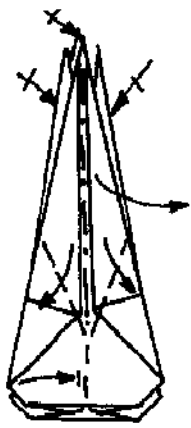
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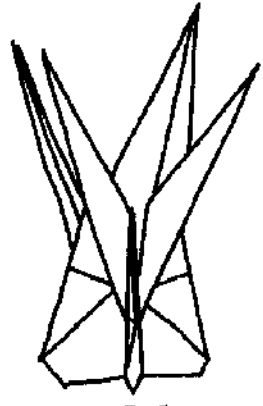
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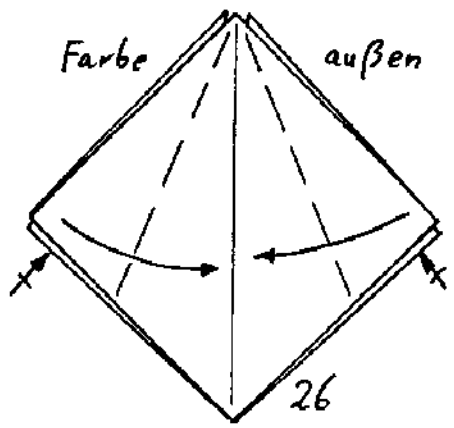
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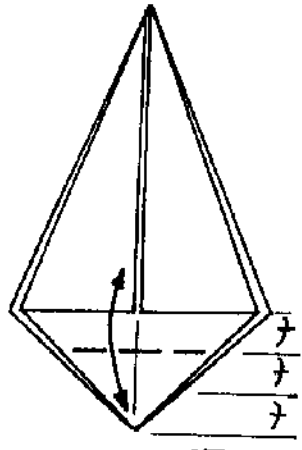
25

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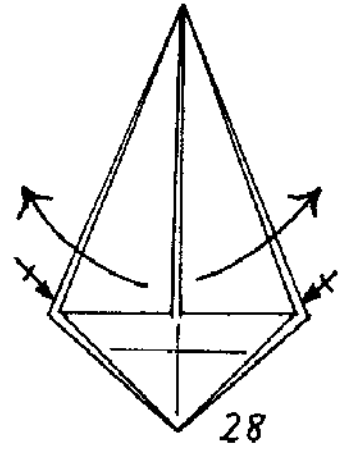
c) Blätter: □ 15x15



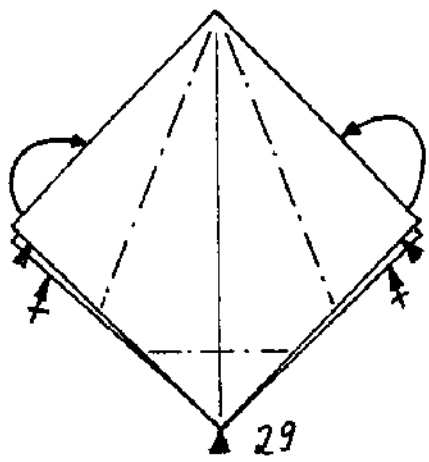
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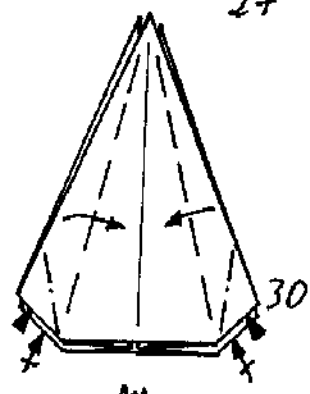
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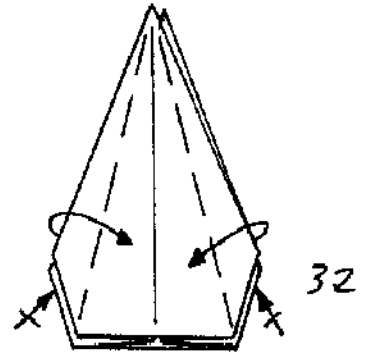
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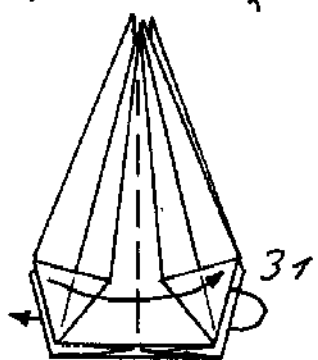
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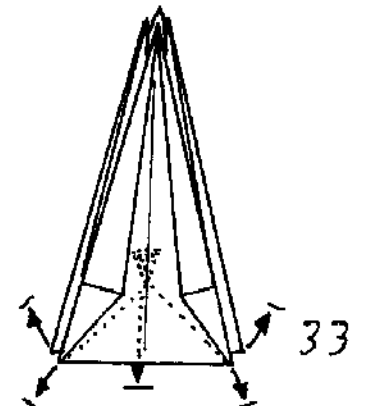
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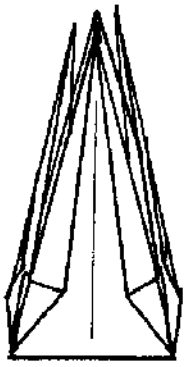
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31



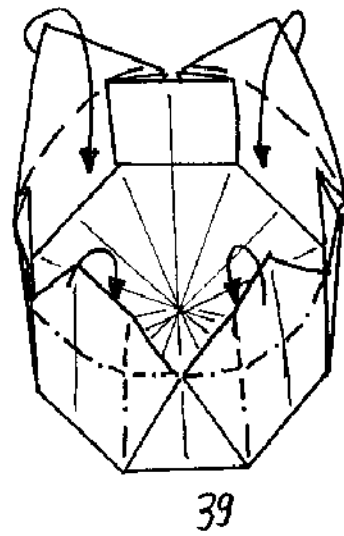
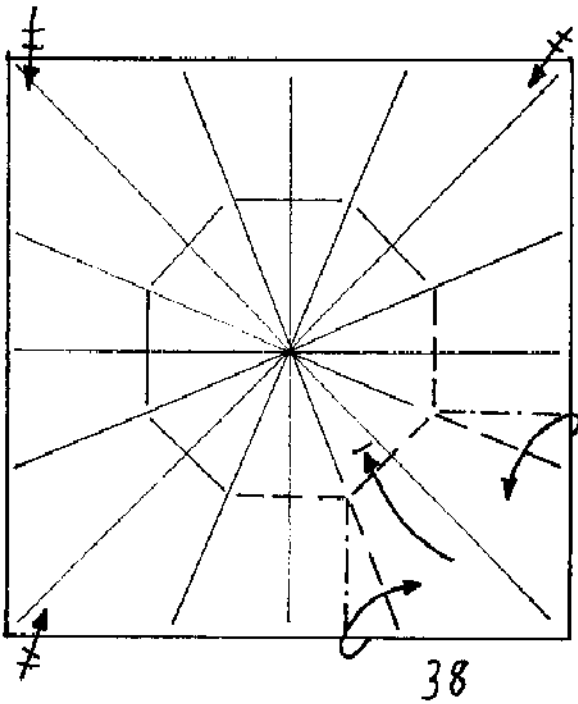
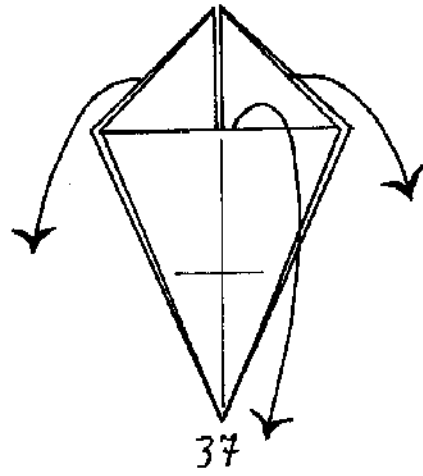
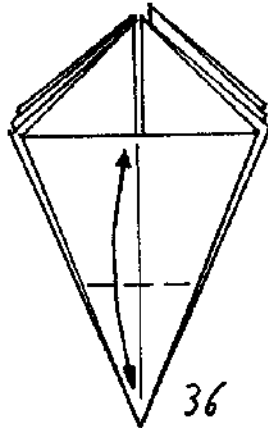
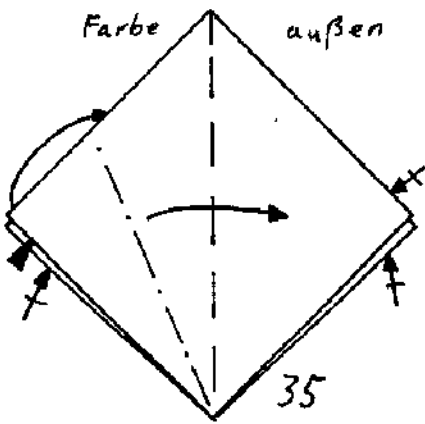
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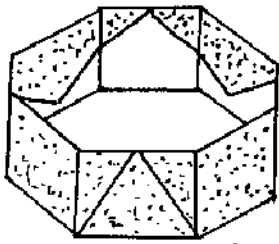


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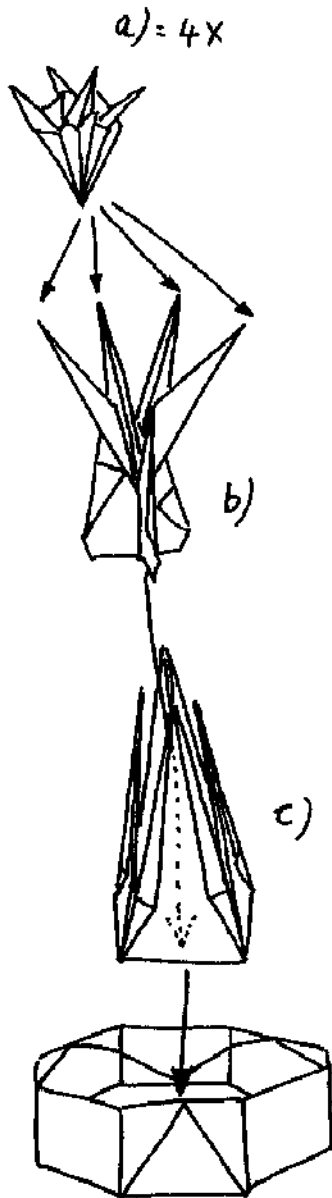
d) Der Topf: □ 12 x 12



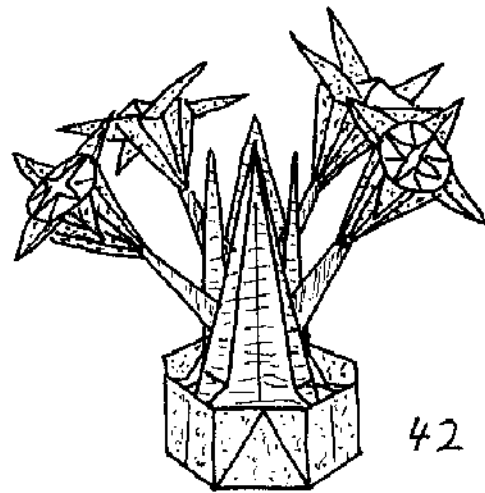


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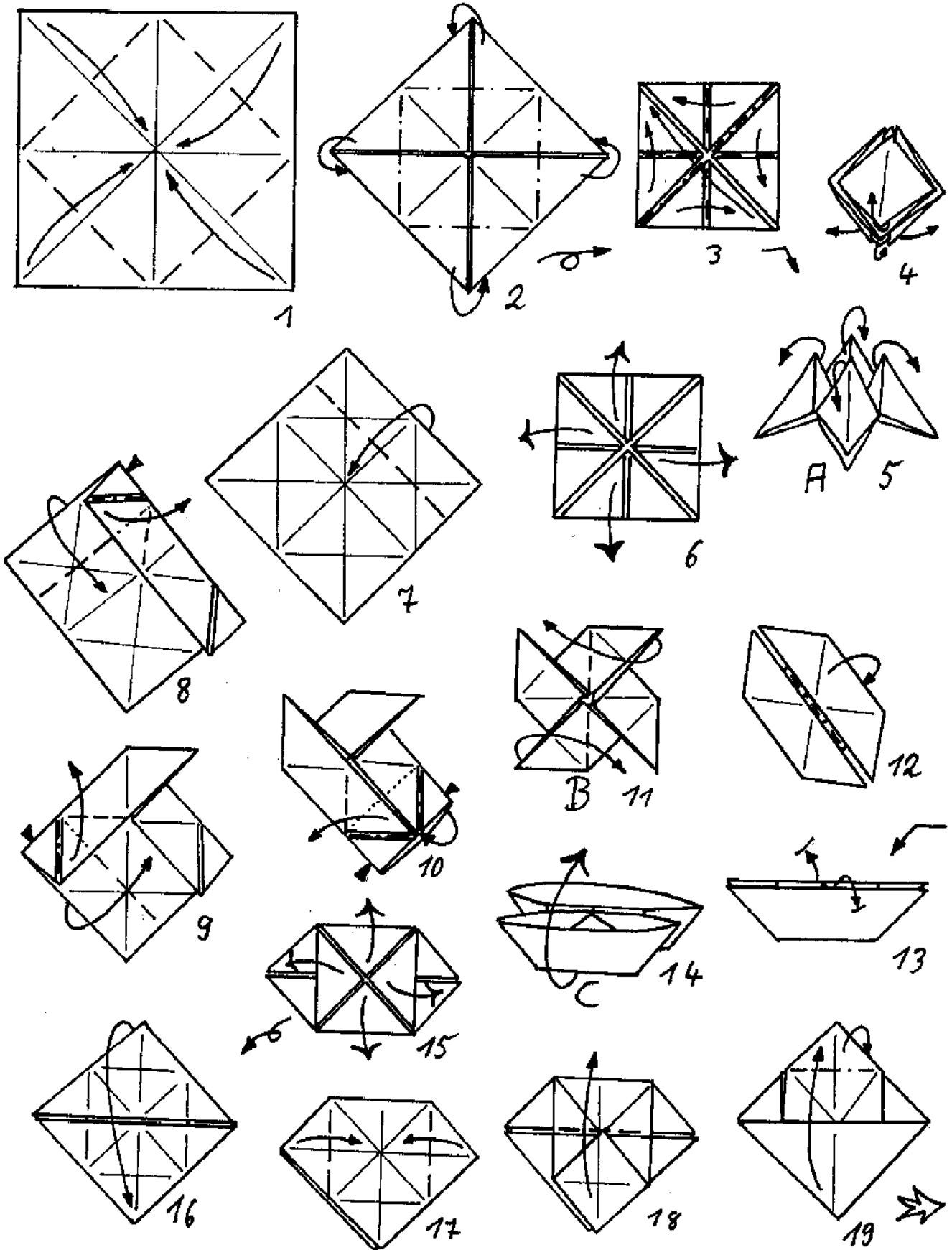
42

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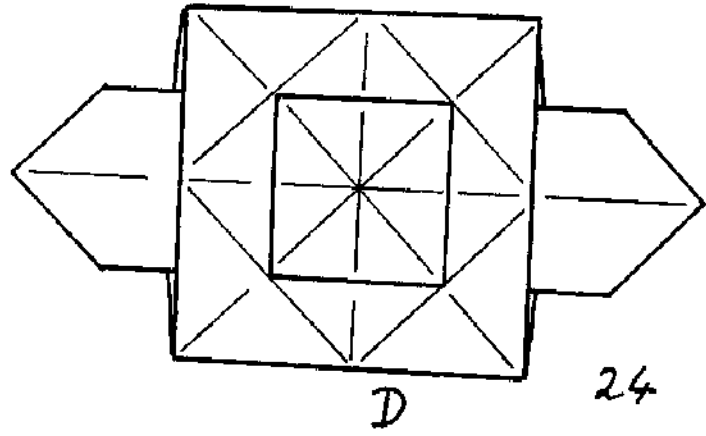
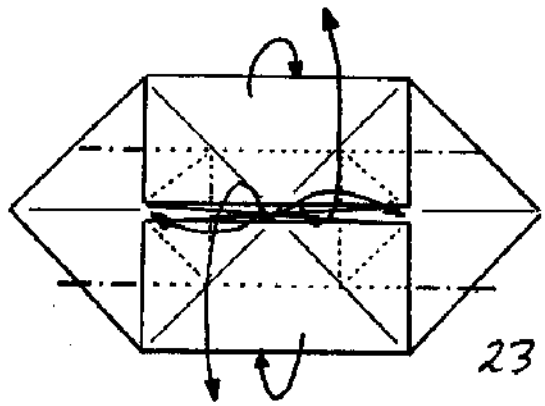
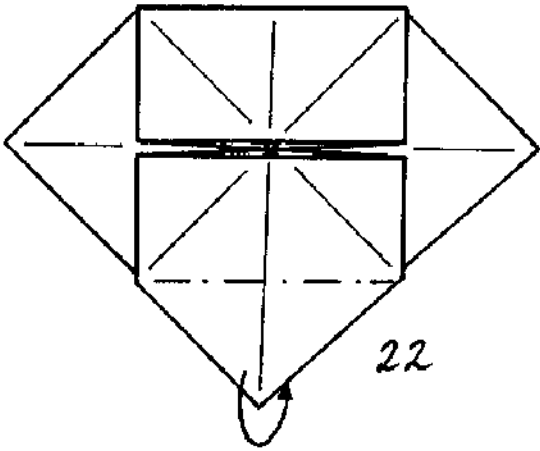
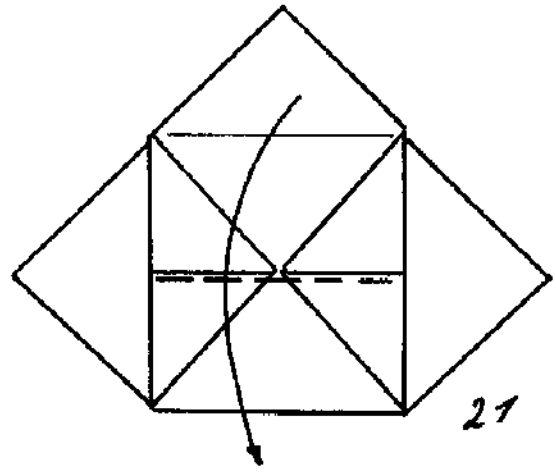
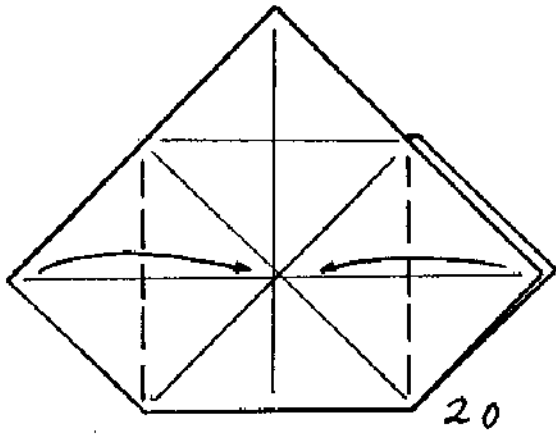
Wo geht das?: Das Objekt von Elke Henke, welches Sie mit Thoki Yenn vor Jahren mal gefaltet hatte. Beim Endprodukt stellt sich die Frage, wo ist Himmel & Erde, Windmühle, Katamaran, und wie zum Ende kommen?

Rekonstruiert von: Klaus-Dieter Ennen

Farbe unten





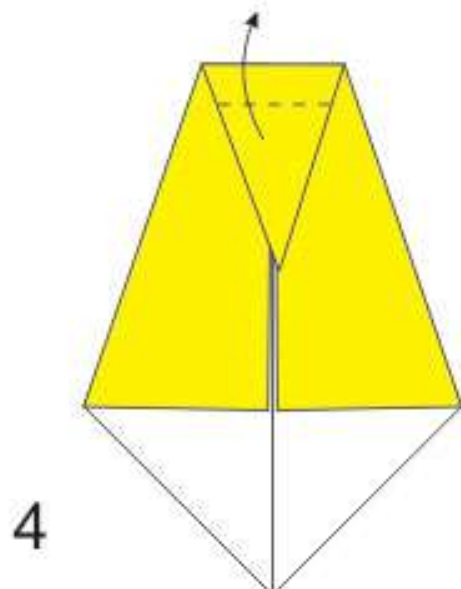
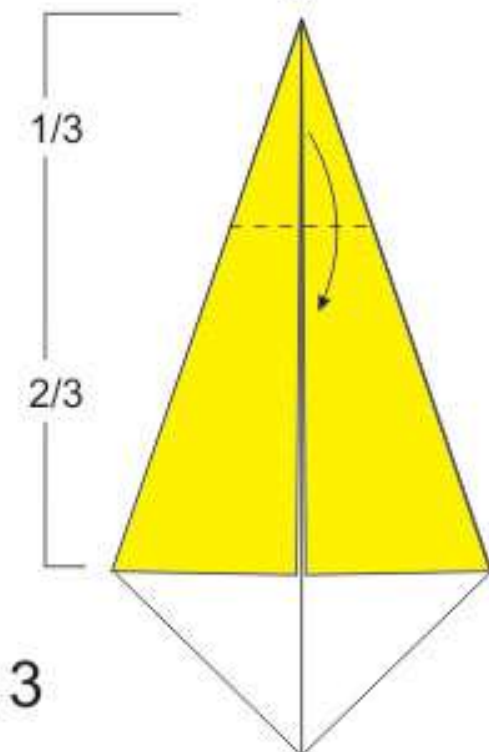
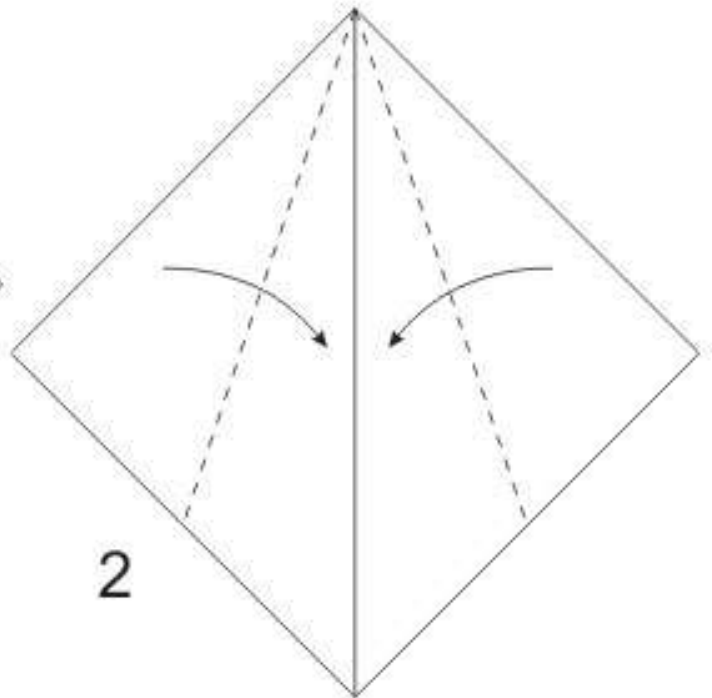
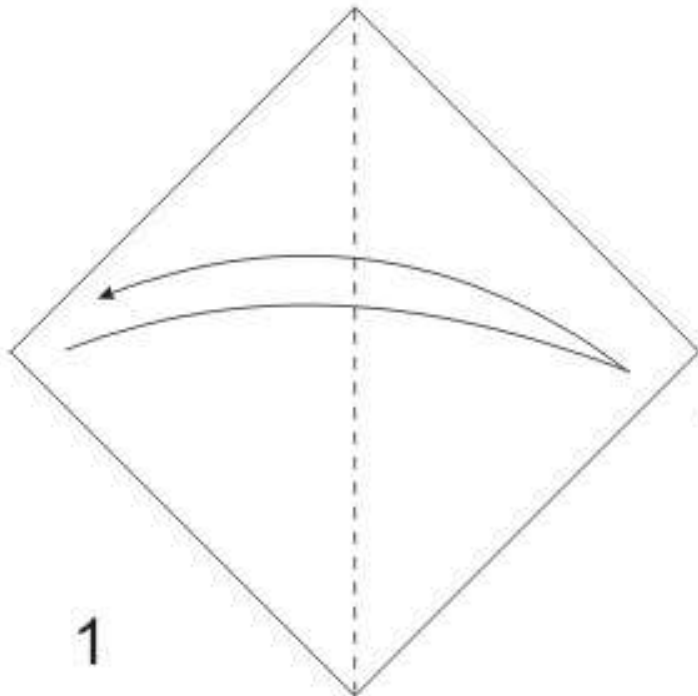


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# Christmas Bell

by Himanshu Agrawal

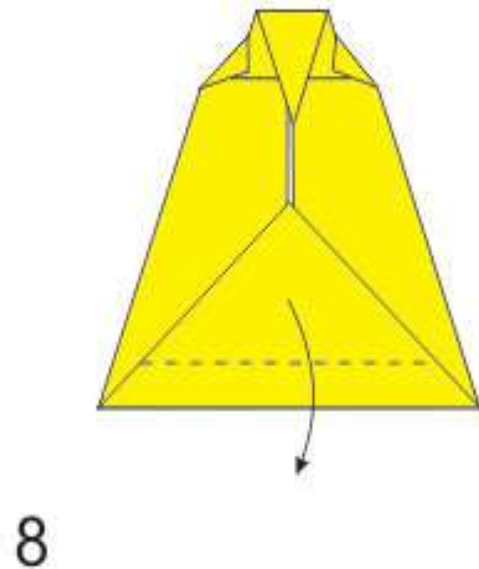
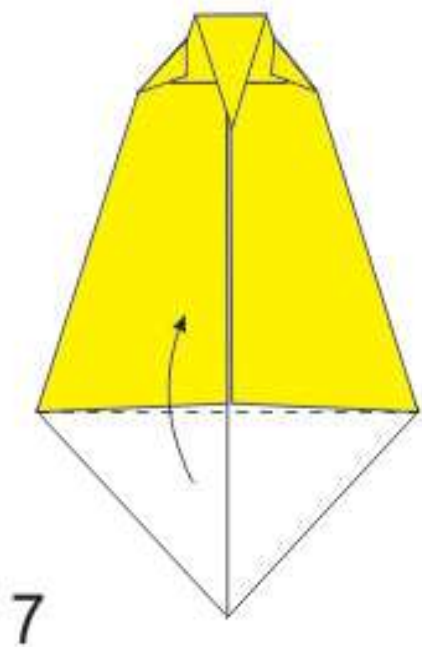
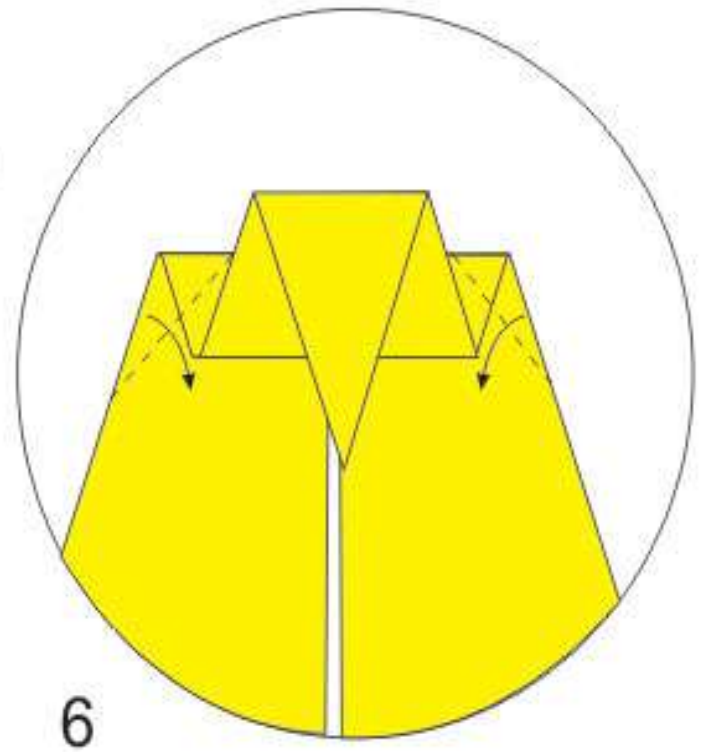
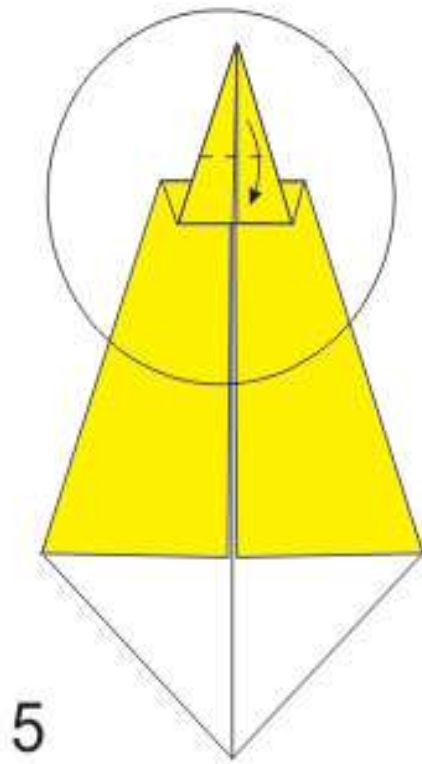
For best results, use a 3" square of golden foil.



There are no specific reference points for the rest of the steps. You can experiment with the proportions to make other variations.

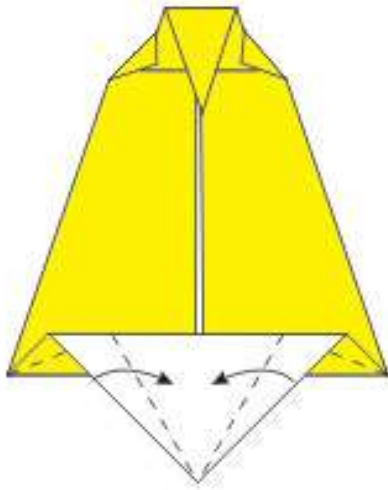
# Christmas Bell

by Himanshu Agrawal



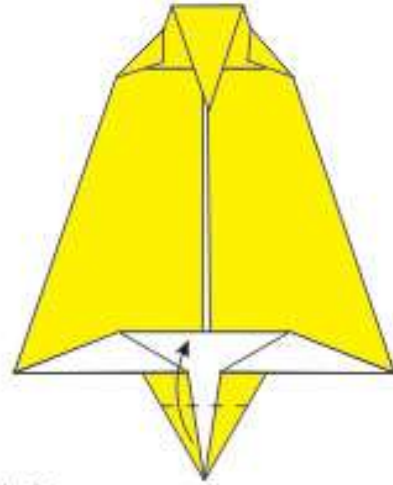
# Christmas Bell

by Himanshu Agrawal

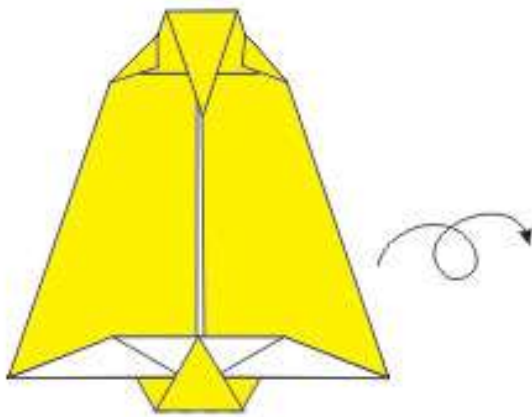


9

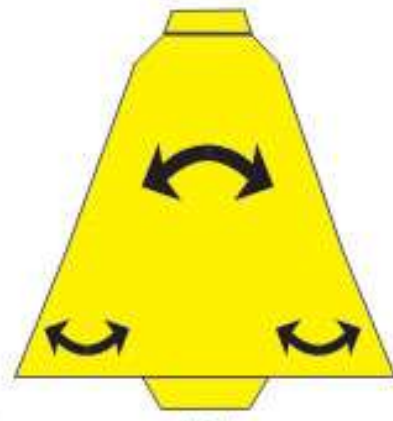
Spread-squash



10



11



12

Shape the bell by curling the center and the side-points. You can narrow the clapper to make it 3D.

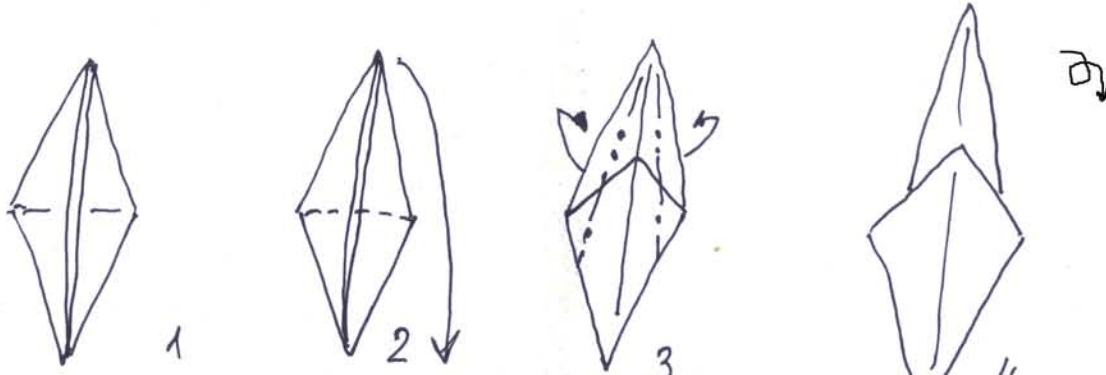
# Christmas Bell

by Himanshu Agrawal

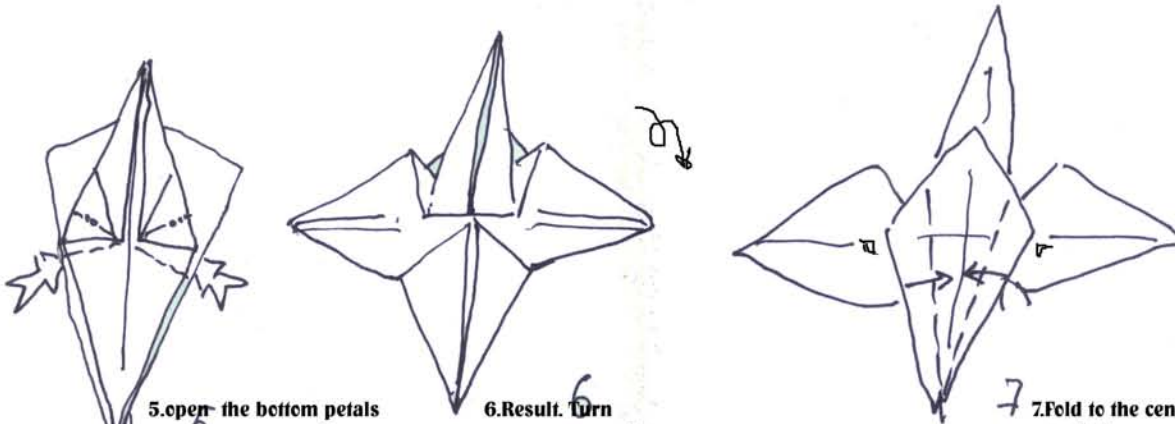


*Himanshu  
Dec '06*

**Model : «Wild orchid» author : Soukharevsky Olga  
Poltava origami club, Ukraine**



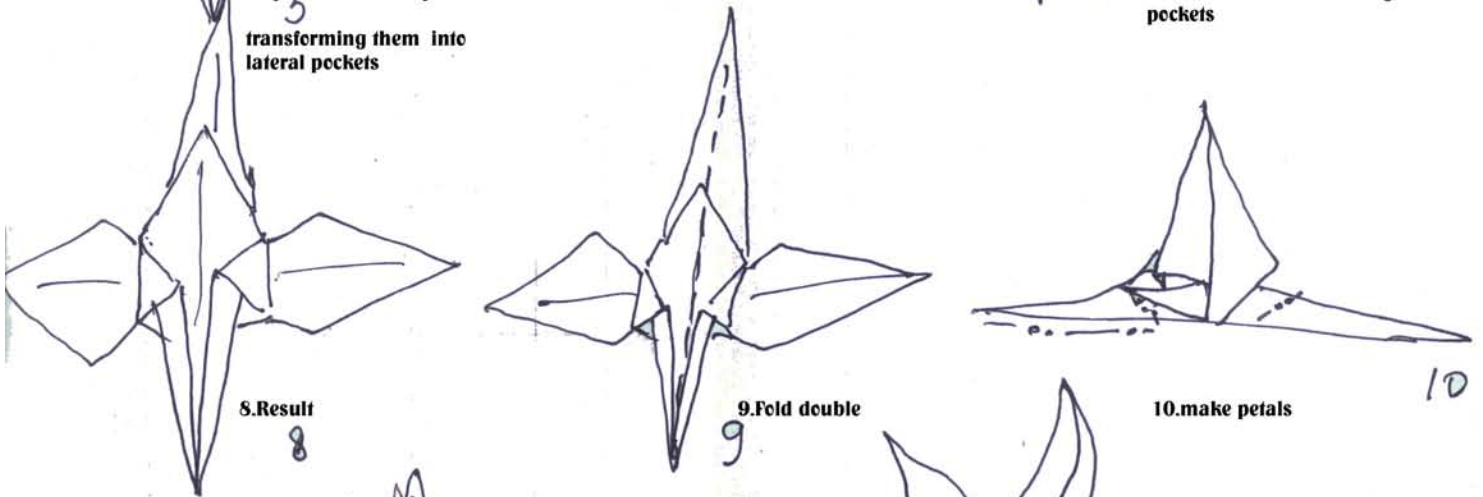
1 begin with the base form «bird» 2.fold downwards one corner 3.fold mountain a back layer of a paper 4.result turn



5.open the bottom petals transforming them into lateral pockets

6.Result. Turn

7.Fold to the center flattening out pockets



8.Result

9.Fold double

10.make petals



11.Open

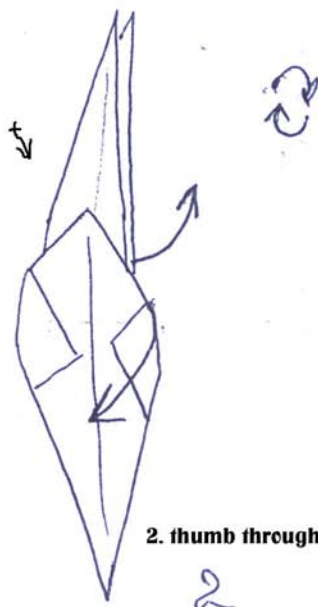


12.Flower

**model: Rat author : Soukharevsky Olga  
Poltava origami club, Ukraine**



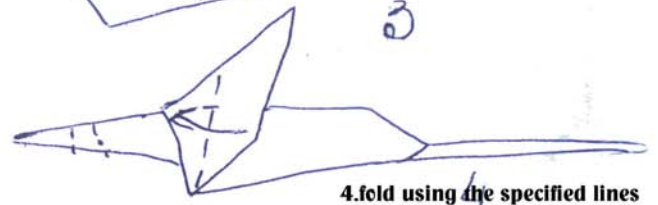
1. Begin from step 3  
«wild orchid» diagram



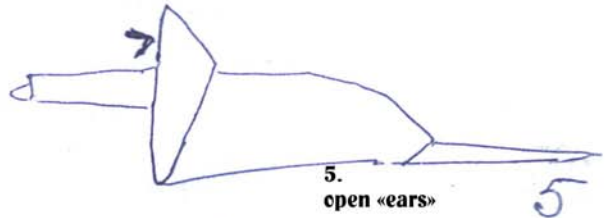
2. thumb through from 2 directions



3. lift upwards ears



4. fold using the specified lines



5. open «ears»



Result Rat

## Horned Snake

Created and diagramed by Henry Tang [mintai2003@gmail.com](mailto:mintai2003@gmail.com)

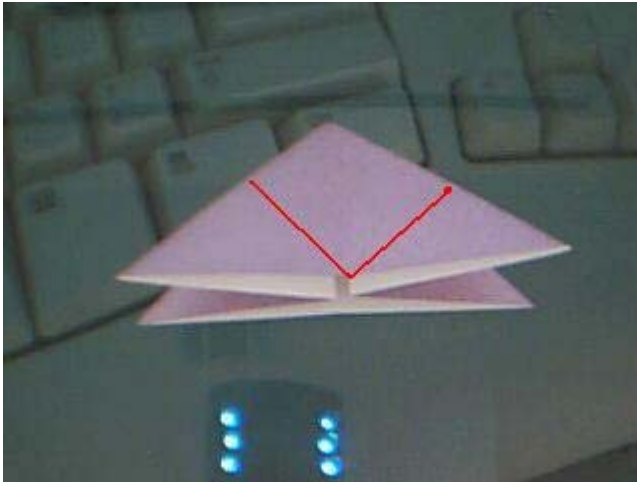
**Red** – Valley fold

**Blue** – Mountain fold

Note: This model should be done with either thick paper or small paper so the finished model can stand up. I used 2 inch by 2 inch commercial origami paper. I have also found that magazine pages used to fold this model probably have the lowest chance of standing up, so don't use it.

Head Part: Start with balloon base.

-1-



Valley fold so that the corners touch the tip.

-2-



Like this. Unfold.

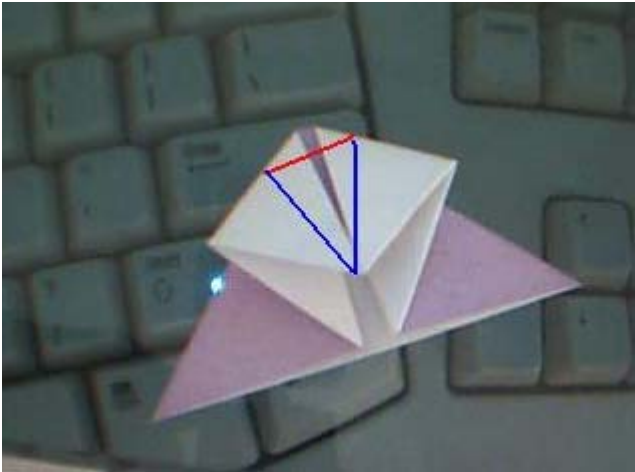
-3-





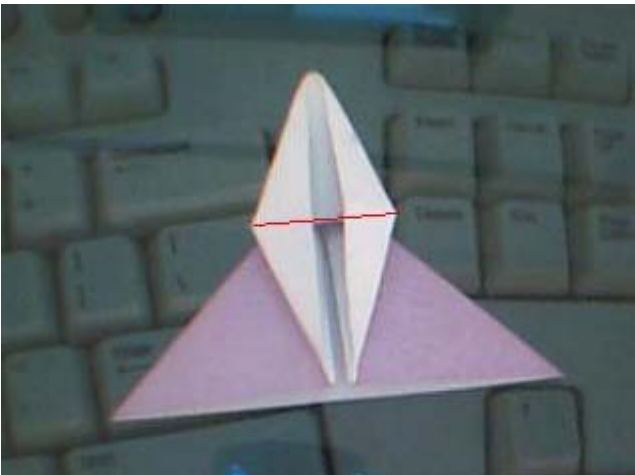
Outside reverse fold along the crease from the last step.

-4-



Petal fold.

-5-



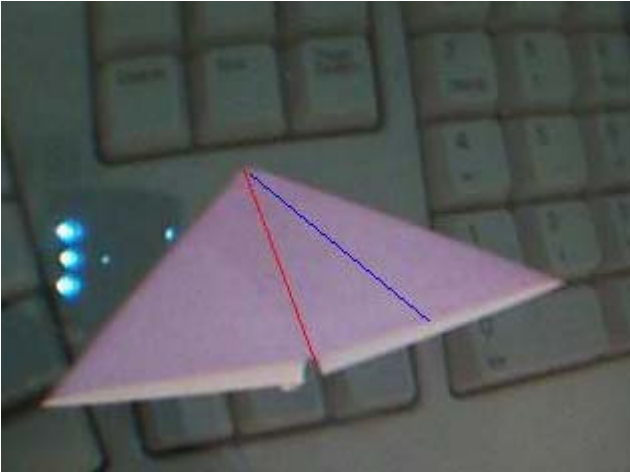
Valley fold the flap down.

-6-



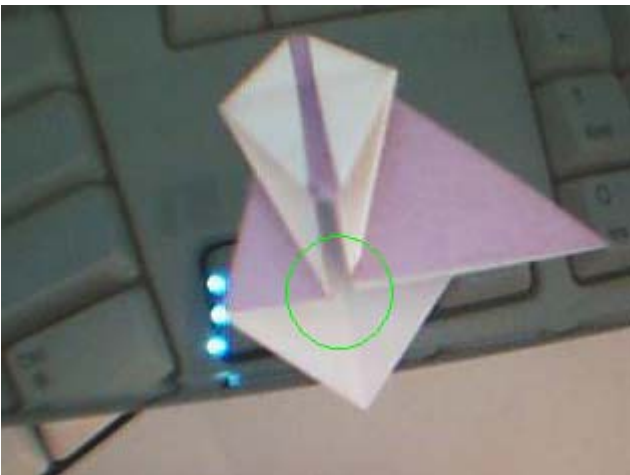
Should look like this. Now flip over.

-7-



Lift up one flap and squash fold. Flip over.

-8-



View from the back. Notice how the crease line is aligned with the center of the petal fold. Flip over.

-9-



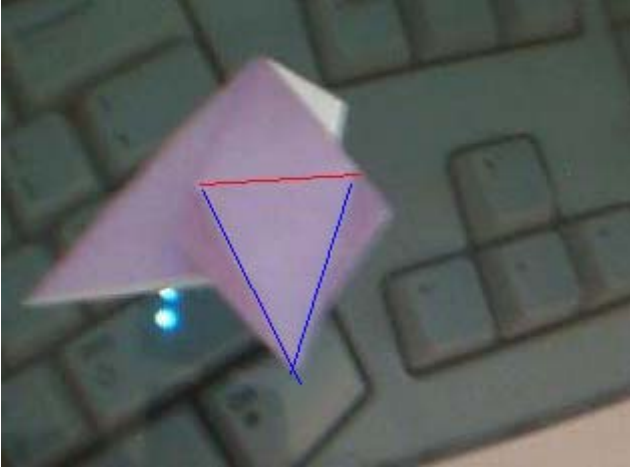
Valley fold each side so the edges touch the center.

-10-



Like this. Unfold.

-11-



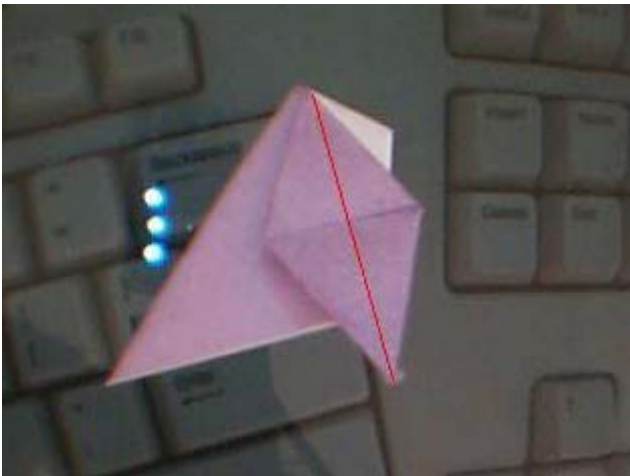
Petal fold along the creases from the last step.

-12-



Fold the flap down.

-13-



Fold the flap over.

-14-



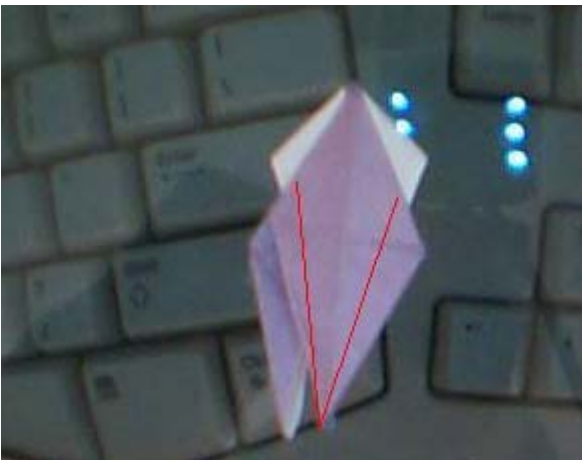
Should look like this now. Repeat steps 7-13 on the other side.

-15-



Like this. Now fold one side over (just the flap).

-16-



Valley fold each side in so the edges touch the center.

-17-



Like this, now unfold the side to the right.

-18-



Sink fold along the crease from the previous step.

-19-



Side view.

-20-



Now fold the flap back over as in step 15.

-21-



Repeat steps 15-20 on the other side.

-22-



Inside reverse fold the "horns" up so that the edges of the "horns" touch the edges of the "head."

-23-



Like this. Now mountain fold the “teeth” downwards.

-24-



Pinch them.

-25-



Like this.

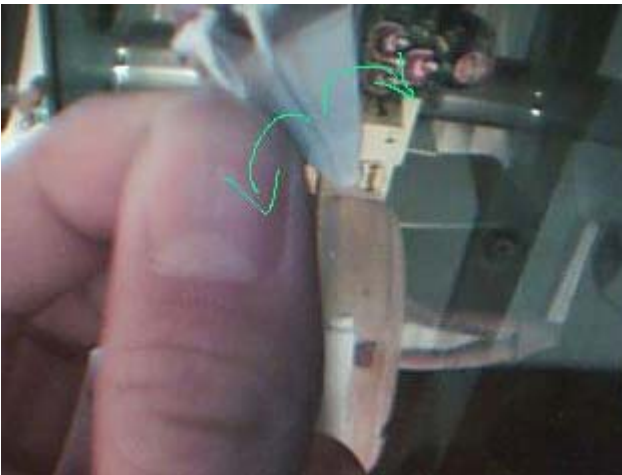


-26-



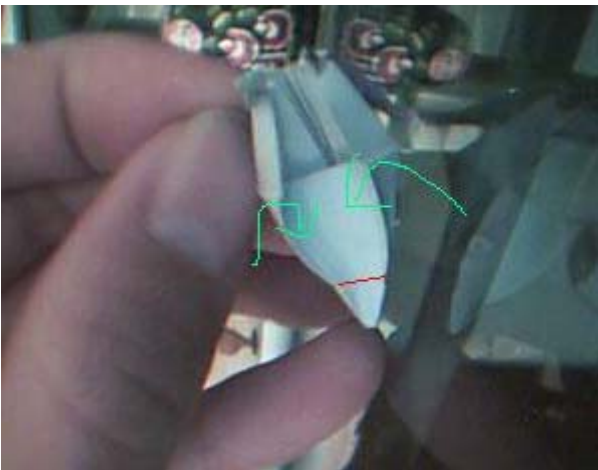
Valley fold the tip of the “jaw” upwards slightly and unfold.

-27-



Open up.

-28-



Valley fold the tip back in and close.

-29-



Like this.

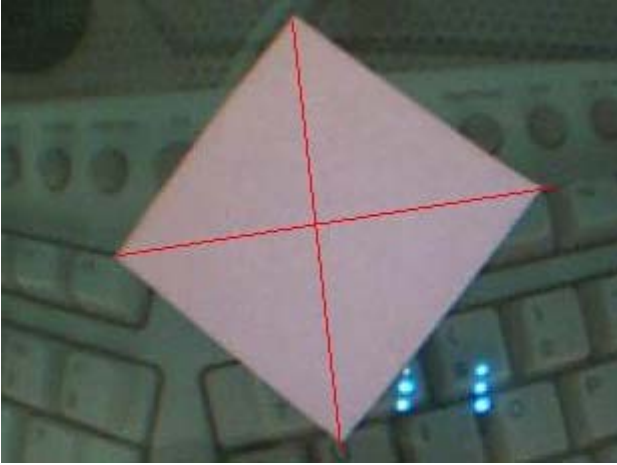
-30-



Finished head.

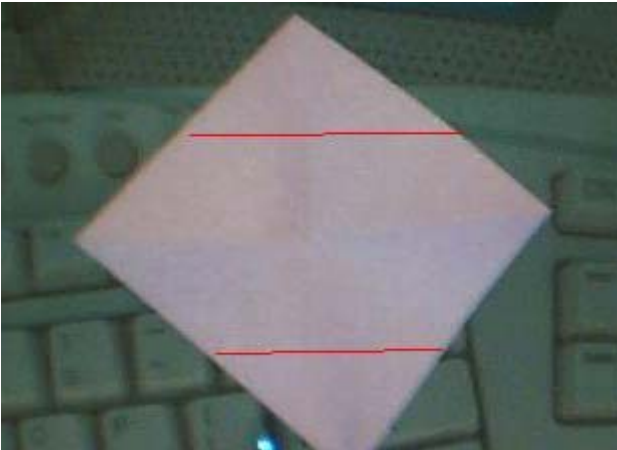
Body Part: Start with the desired exterior color facing downwards. I prefer white on the outside so I fold with the colored side up.

-1-



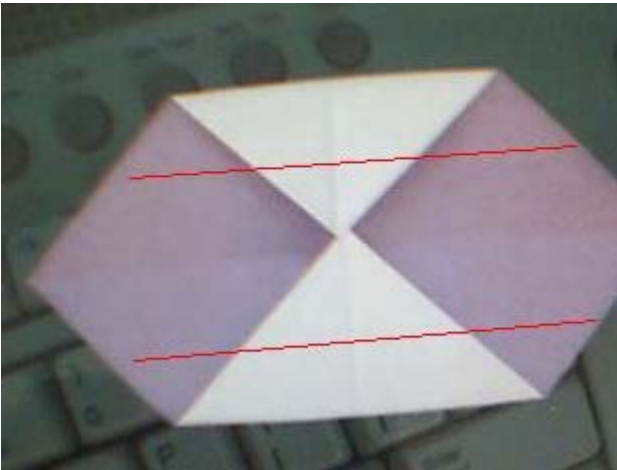
Valley fold the diagonals and unfold.

-2-



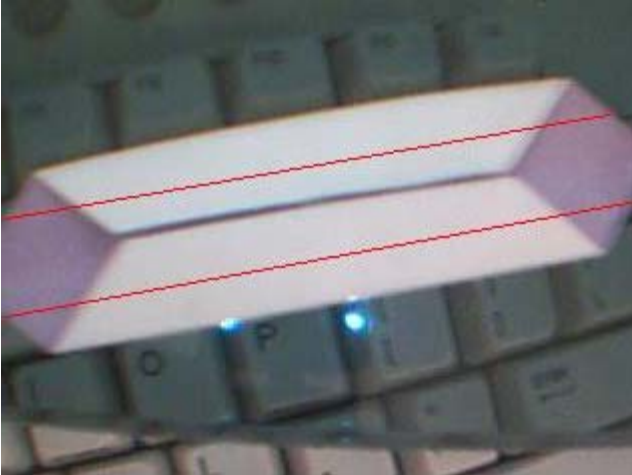
Valley fold so the tips touch the center.

-3-



Valley fold so the edges touch the center.

-4-



Valley fold so the edges touch the center.

-5-



Fold in half.

-6-

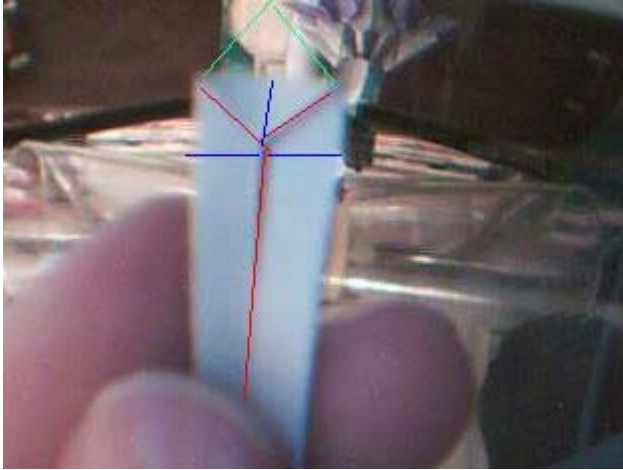


Basic body module.

Body Variations:

Neck: Open up.

-1-



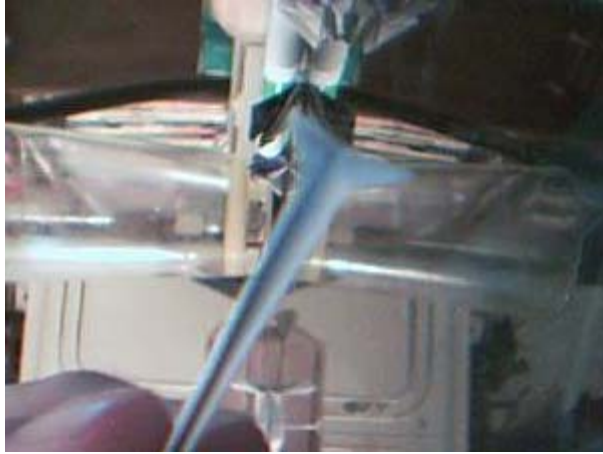
Holding it so that the colored square is facing towards you. Fold the tip downwards and as you fold the entire module in half again, inside reverse fold the top following the existing lines.

-2-



Like this.

-3-



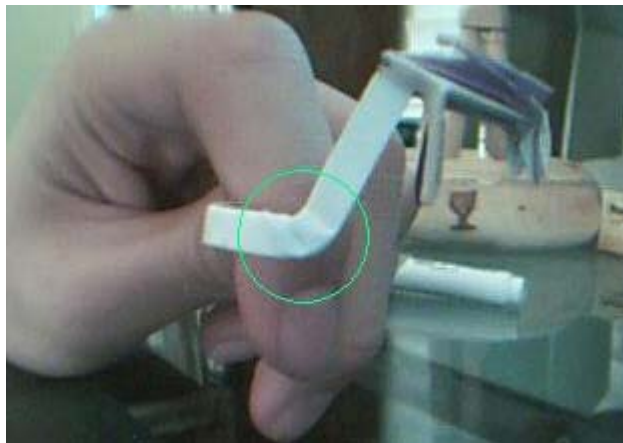
Completed neck part.

-4-



Insert the neck inside the back of the snake head.

-5-



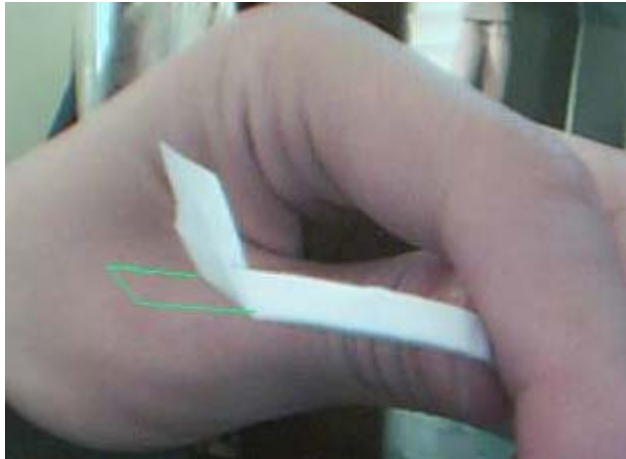
Inside crimp.

Interlocking Bodies:



To connect the body modules together, slide the pieces into each other like so. It should be know that in order to make a more realistic body, every piece is slipped inside of the next one so that the overlaps are in on uniform fashion. Having the neck piece on the outside. Also, it is recommended to use three body modules for this model, but more or less is okay.

Tail:



Outside reverse fold the end of the body.

Finishing:

-1-



Coil the body around the neck.

-2-

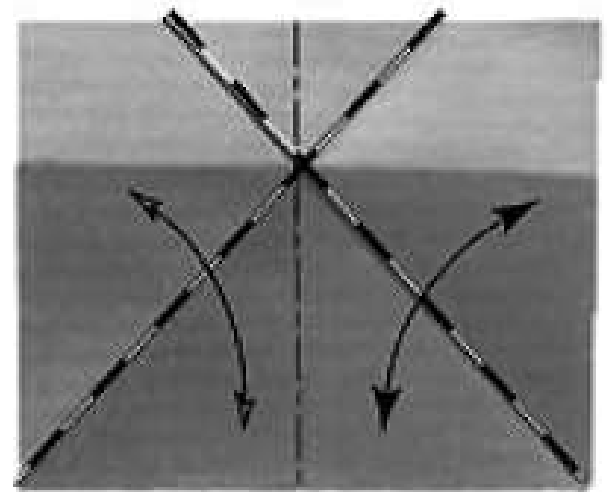
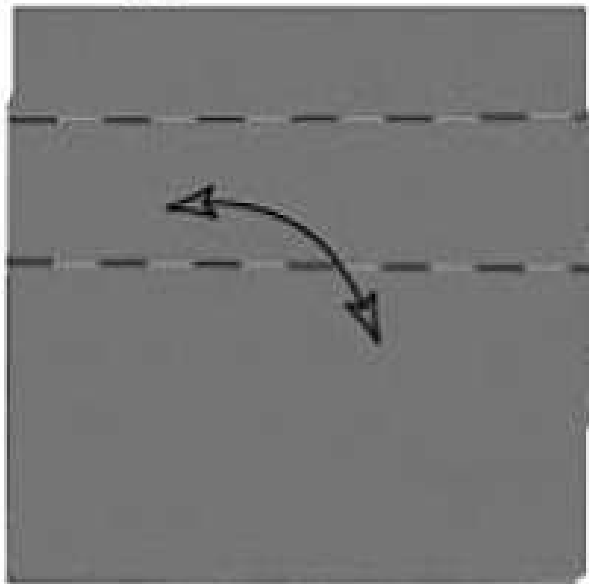


Finished horned snake.

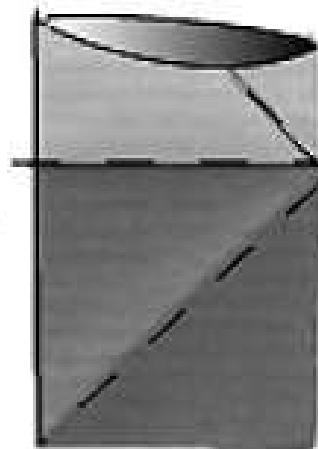


# Doppelherz mit Schleife

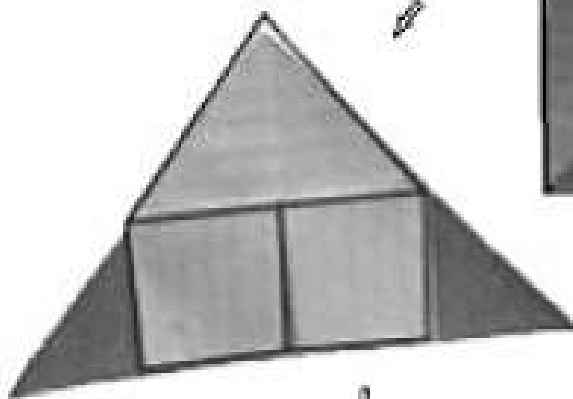
Ulrike Krallmann-Wenzel



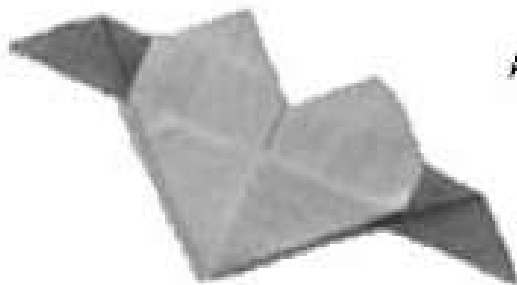
öffnen und  
flachdrücken



vor und zurück falten,  
dann Modell halbieren



die Ecken nach innen versenken



das Herz läßt sich hinstellen,  
wenn man die "Flügel"  
nach unten knickt

Rückseite



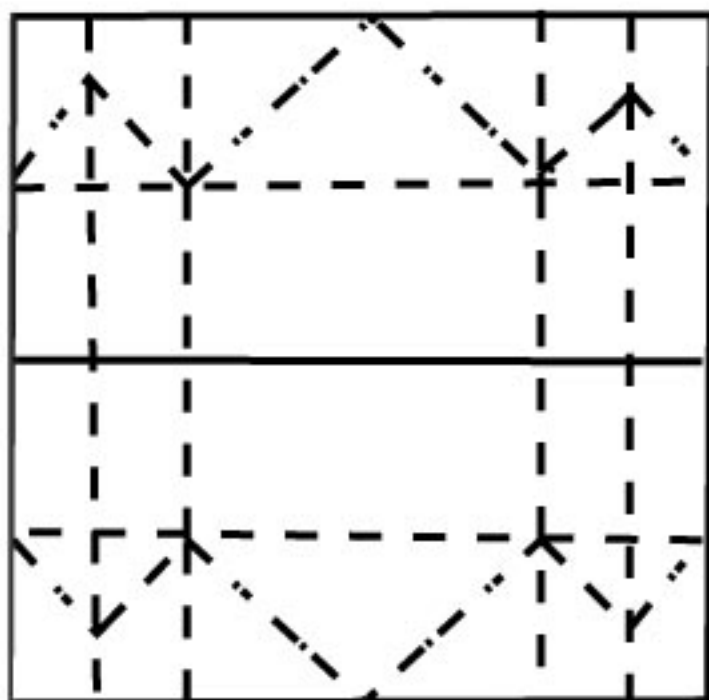
Variationen

Von Ulrike Krallmann-Wenzel  
zum Valentinstag 2006



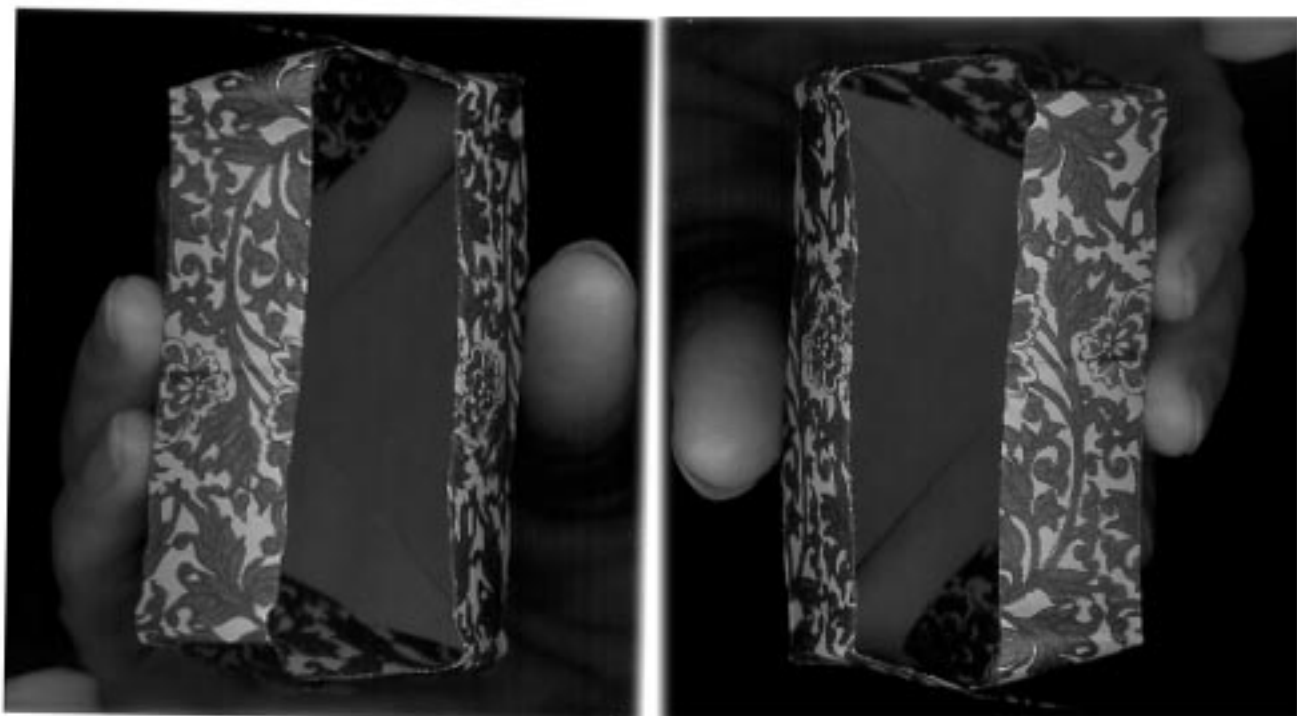


Schachtel mit Paketverschluß  
von Ulrike Krallmann-Wenzel

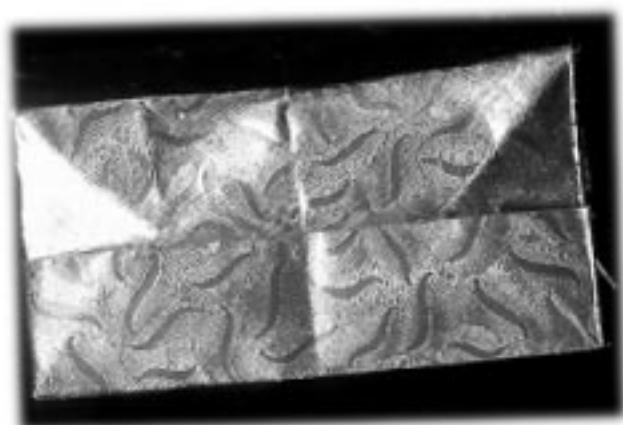


2 mal  
falten





die beiden Hälften zusammenstecken und die Seiten wie bei einem Paket verschließen



Seitenansicht

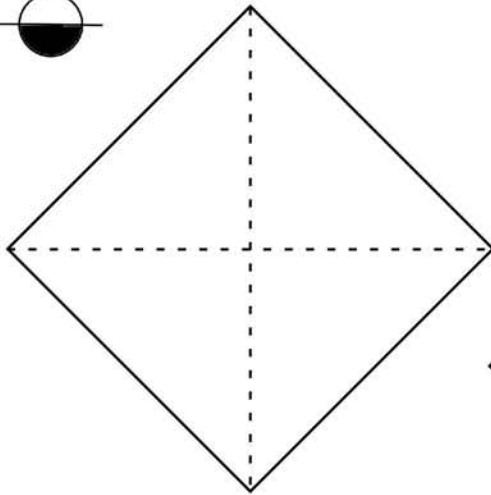


Paketverschluß

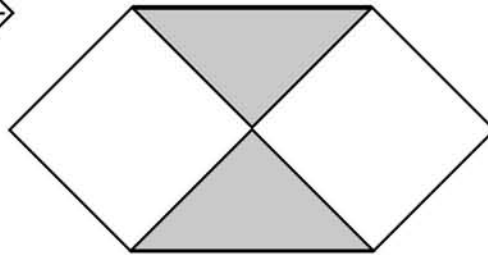
# Gift Bag Troy Bastin

I learned this at PCOC 2006 in Phoenix. It was presented as "Korean Money Bag", and no diagrams were provided to us. I had to rush home and draw them by hand so I could remember how to do it. I just re-drew them on the computer, from my hand-scrawled diagrams, in Canvas X, so there won't be any arrows showing folding directions. Just follow the worded instructions and you should be fine.

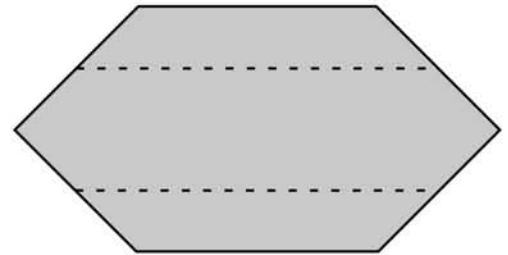
I usually fold this out of 12" scrapbooking paper. The thicker paper makes it a little sturdier, and there are a wide variety of patterns for different occasions.



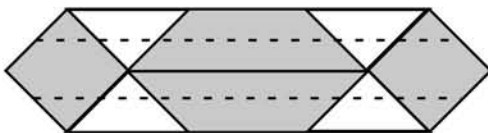
1. Color side down. Valley fold the diagonals.



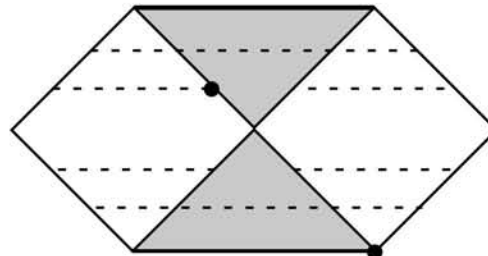
2. Valley fold the bottom corners to the center. Turn over.



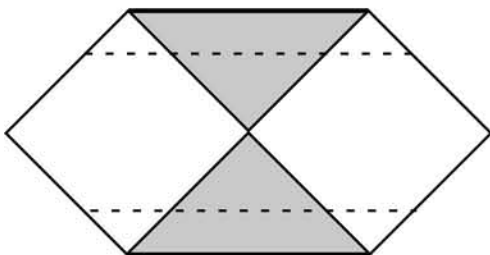
3. Valley fold through all layers to the center.



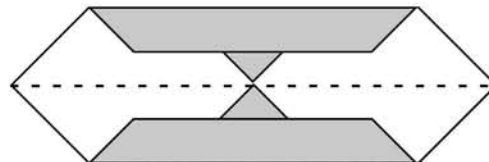
4. Valley fold the middle edges to the outside edges. Then unfold to step 2.



5. Valley fold the bottom corner until it meets at the intersection of the lower crease and the flap, make a crease, then unfold. Repeat on the other 3 corners.



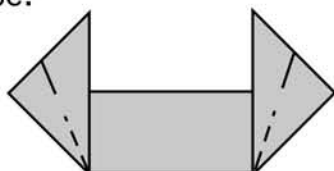
6. Valley fold the bottom and top edges in, on the existing crease.



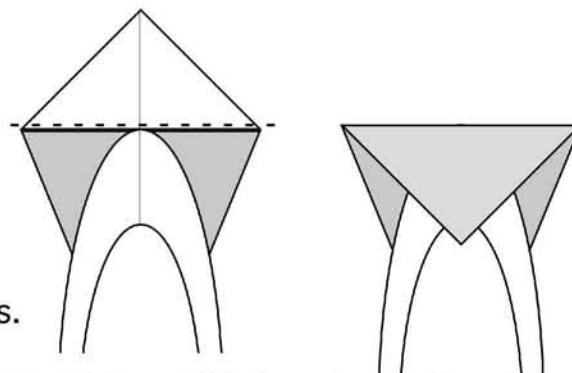
7. Valley fold the model in half.



8. Valley fold on the diagonal, on the existing crease.



9. Squash fold the two corners. Open the model out from the top.



10. Valley fold the triangle flap down.

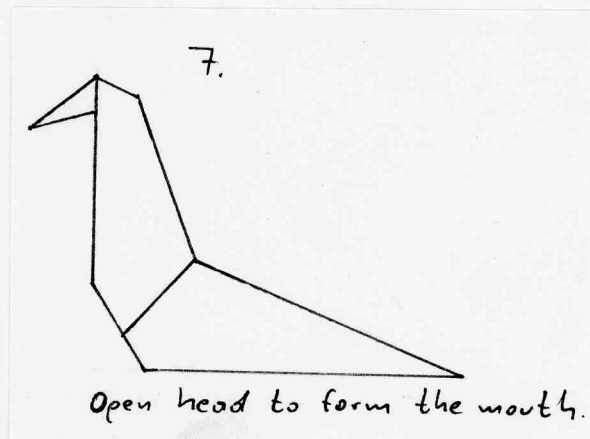
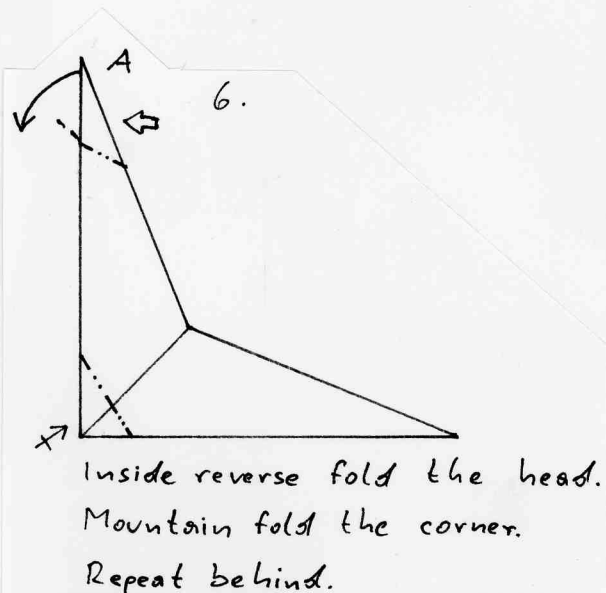
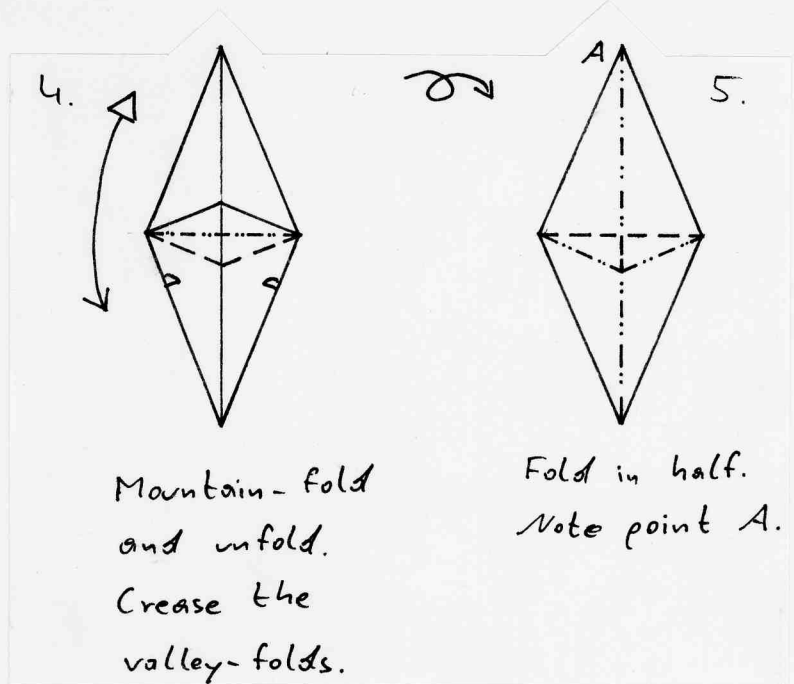
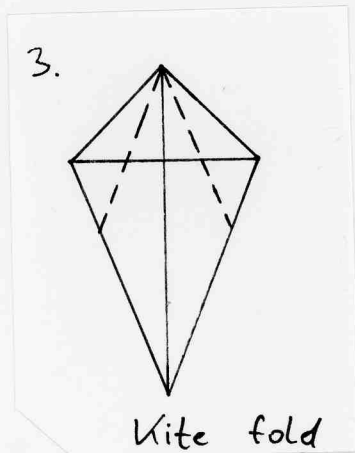
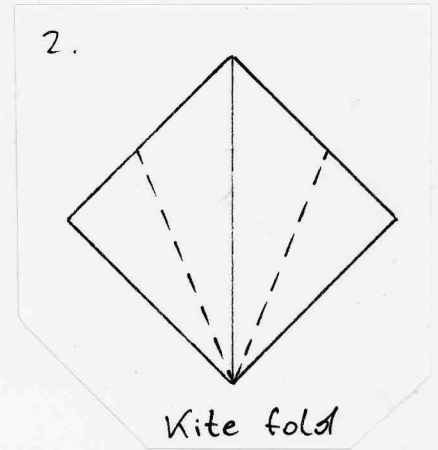
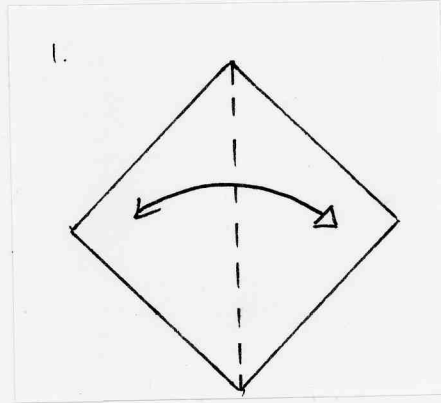
Bring the two triangles together, pinching along the edge of the outside of the model. Tie off with with mizuhiki or flashy ribbon. Additionally, if you tuck one of the triangle flaps inside, you will make a pocket to stick the other flap into, creating a closure.

# Loch Ness Monster

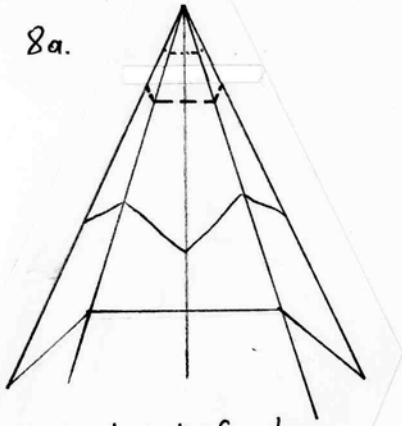
From Wikipedia, the free encyclopedia

Design & diagram: Franz Muskovich

The Loch Ness Monster, sometimes called Nessie or Ness (Scottish Gaelic: Niseag), is said to be a mysterious and unidentified animal, or group of animals, claimed by some to inhabit the Scottish loch of Loch Ness, the largest freshwater loch, or lake, in Britain.

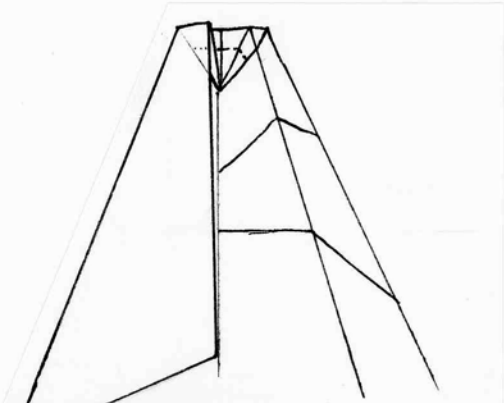


8a.



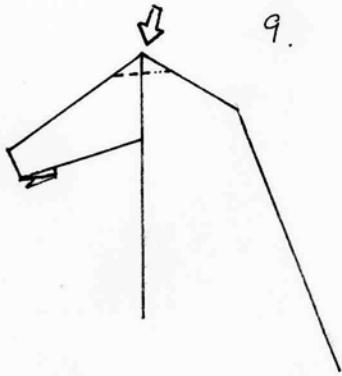
Detail: at first valley down ...

8b.



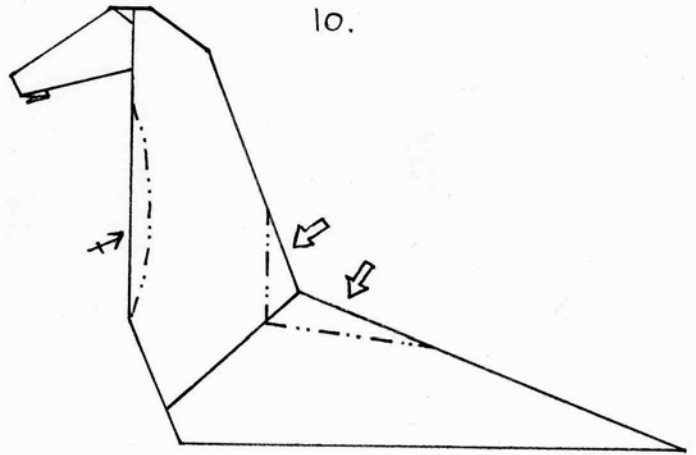
... then valley up.

9.



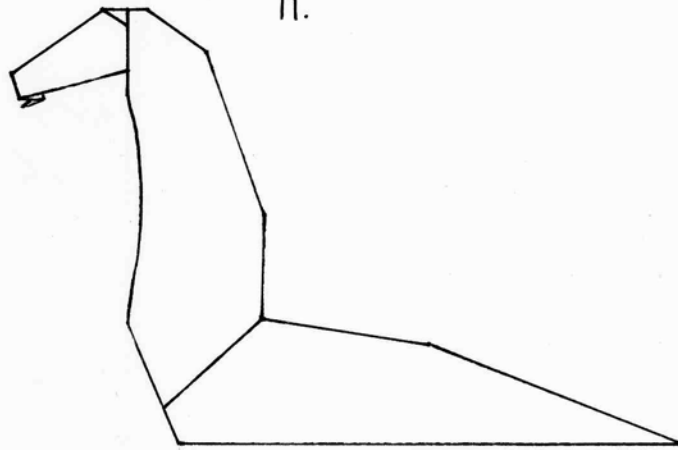
Sink.

10.



Shape to taste. Sink. Sink.

11.

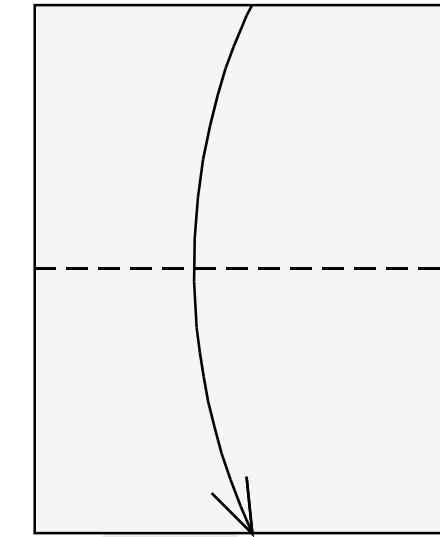
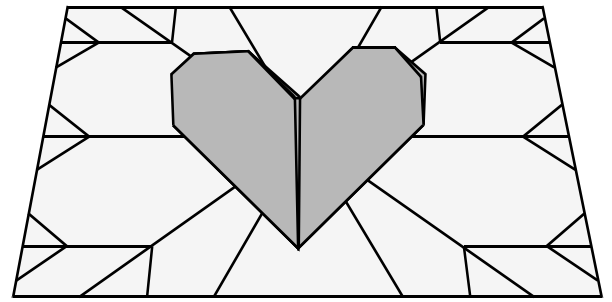




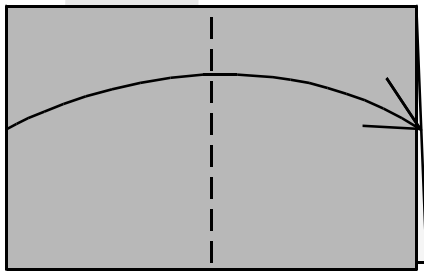
# Letter Heart

©2006 by Jared Needle

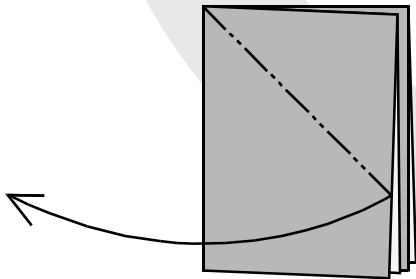
Use a rectangle such as 8.5" by 11" or A4 paper.



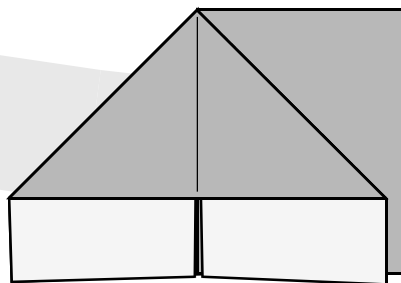
1



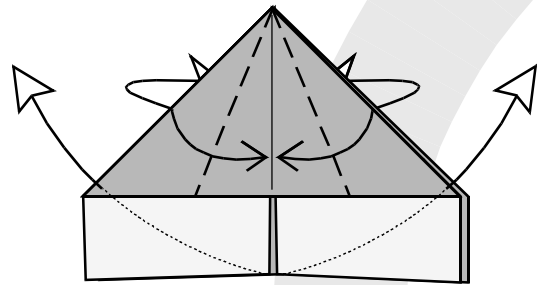
2



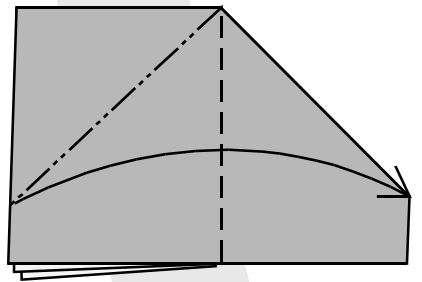
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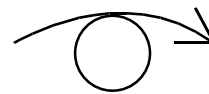
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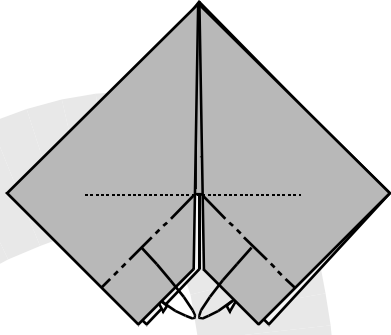
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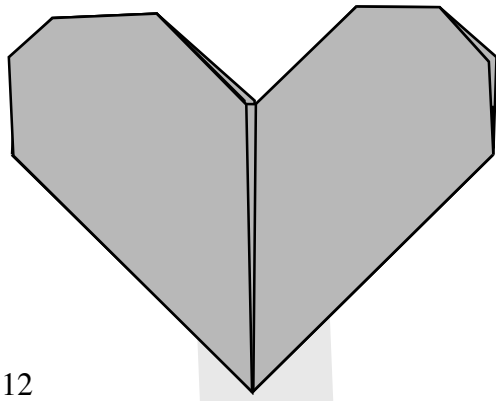
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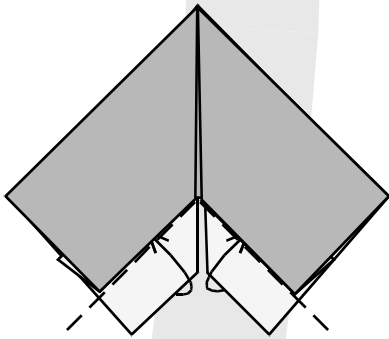
7



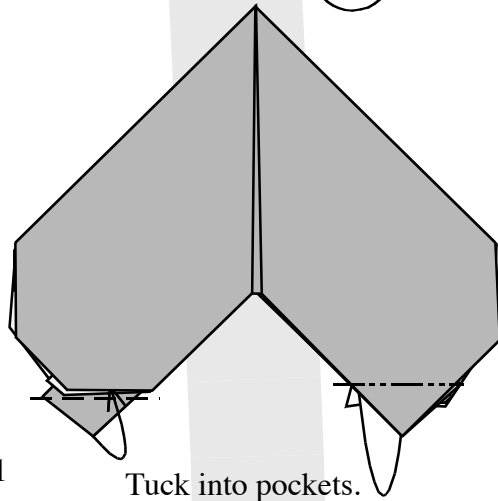
12



8

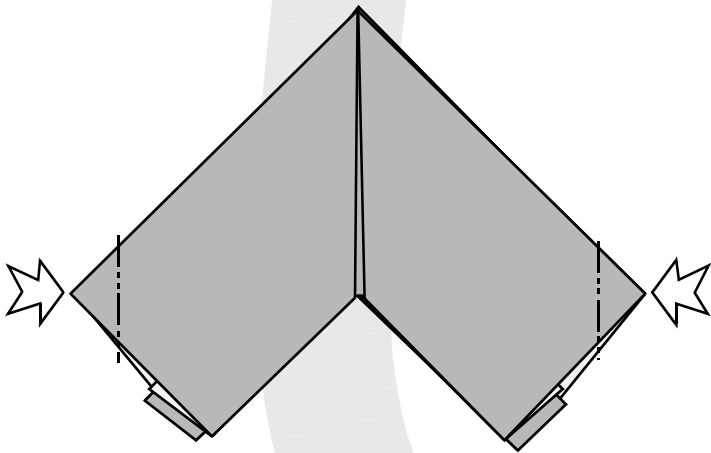


11

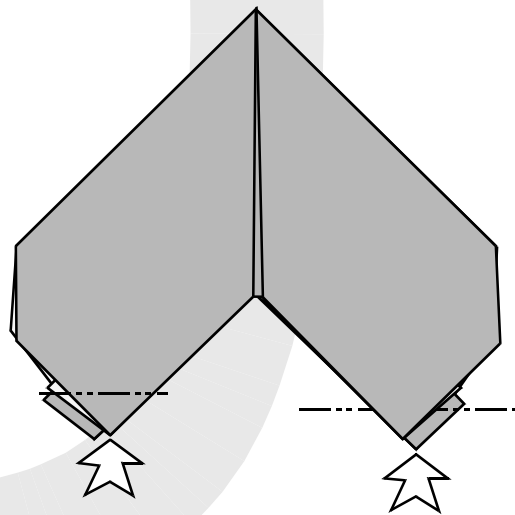


Tuck into pockets.

9



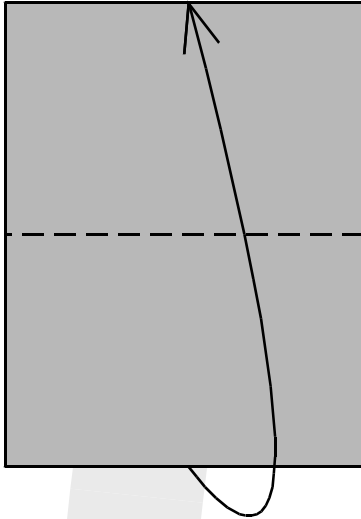
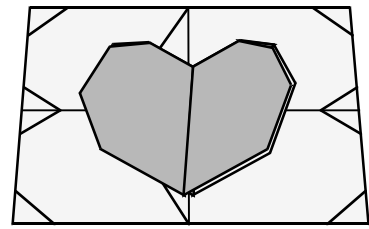
10



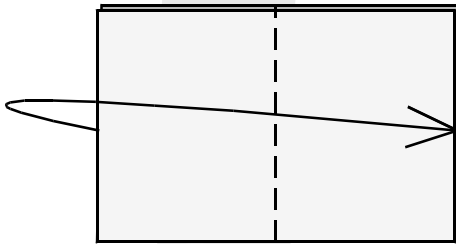
# Letter Heart 2

©2006 by Jared Needle

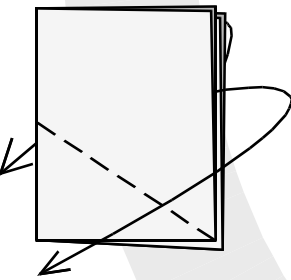
Use a rectangle or square of any size.  
All folds after step 2 can be made to your taste.



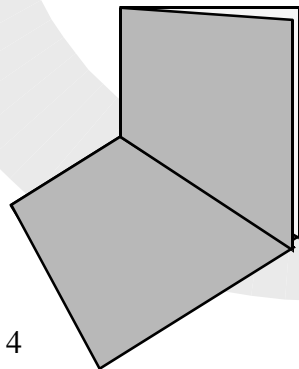
1



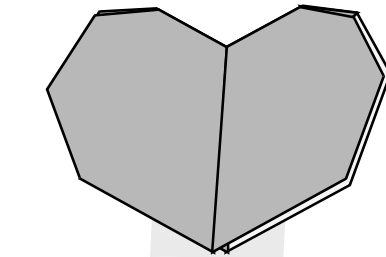
2



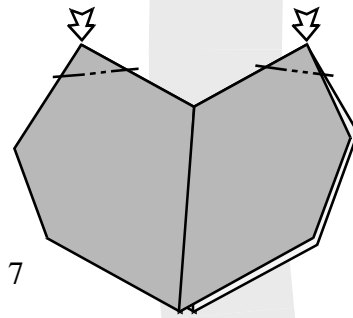
3



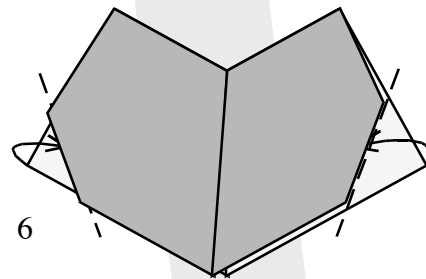
4



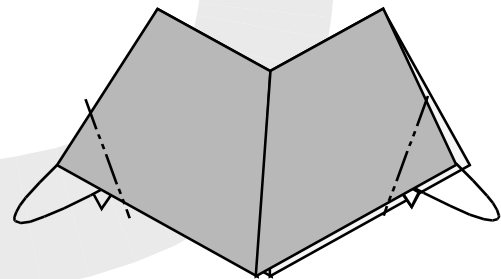
7



6



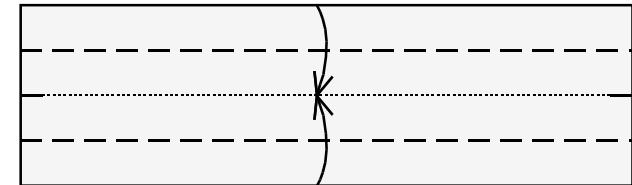
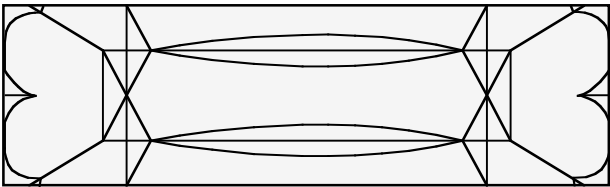
5



# Bone

©2006 by Jared Needle (USA)

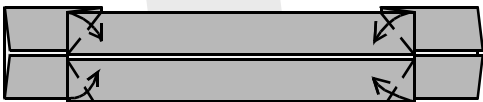
Use a rectangle of proportions 1 x 3 or longer.



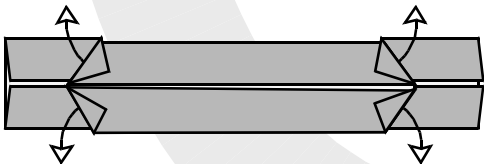
1



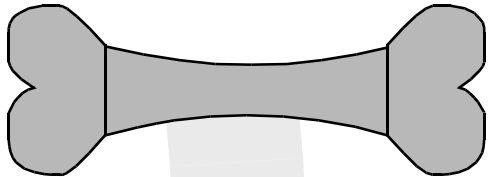
2



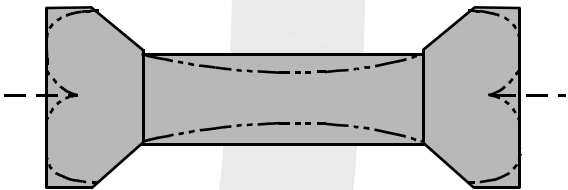
3



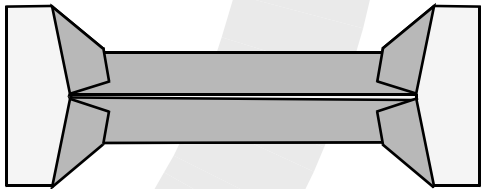
4



7



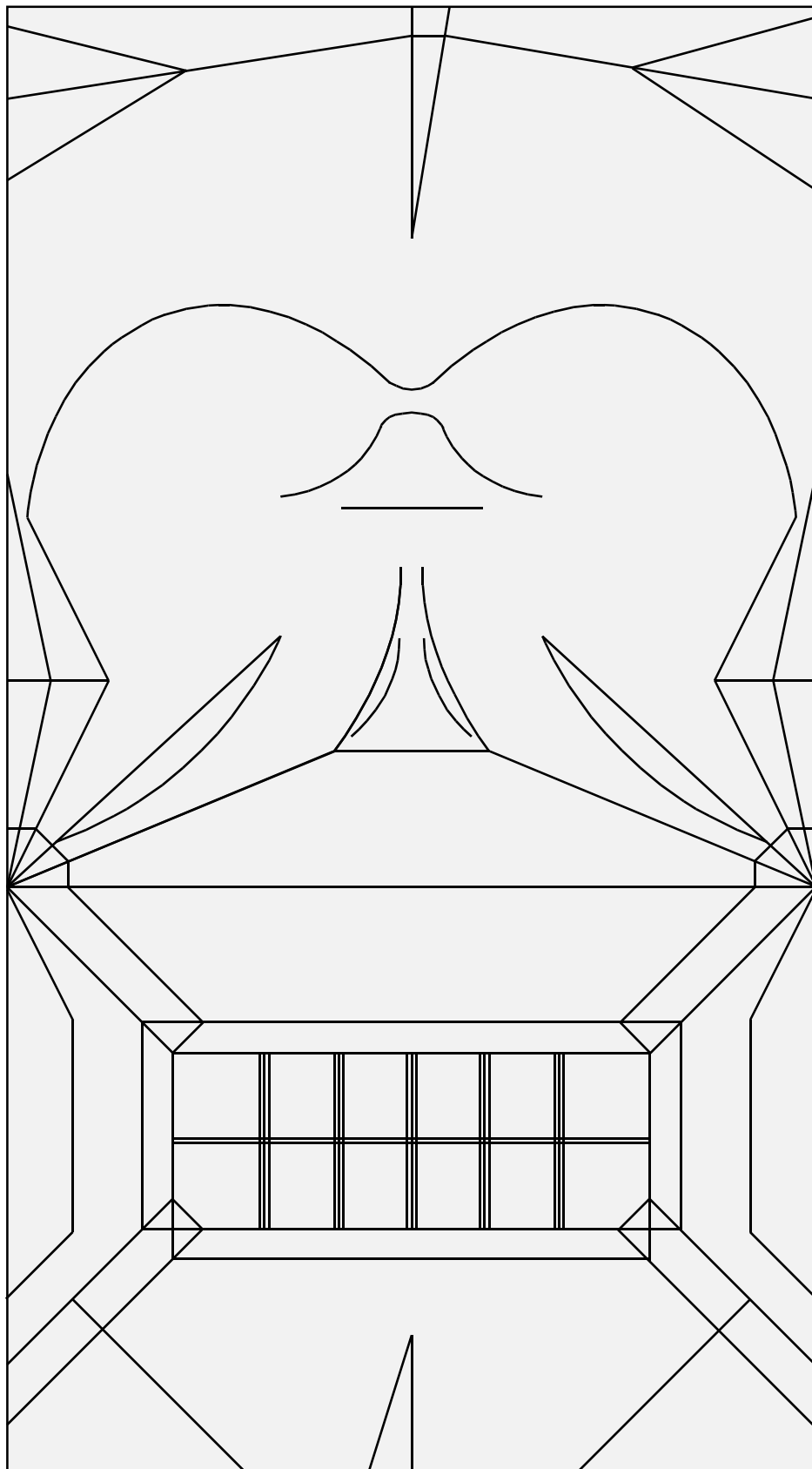
6



5

# Skull

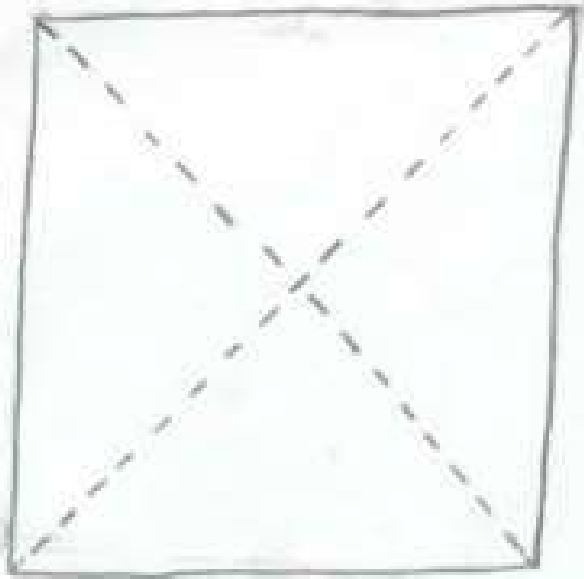
©2006 by Jared Needle (USA)



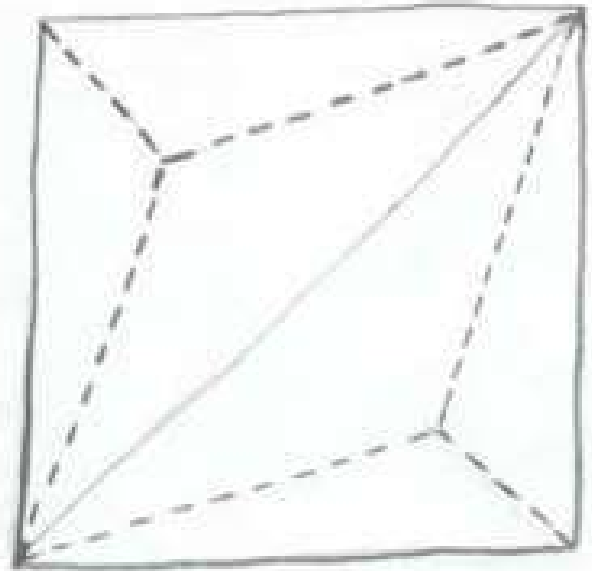


# Dino by Bryant Rice

Step #1



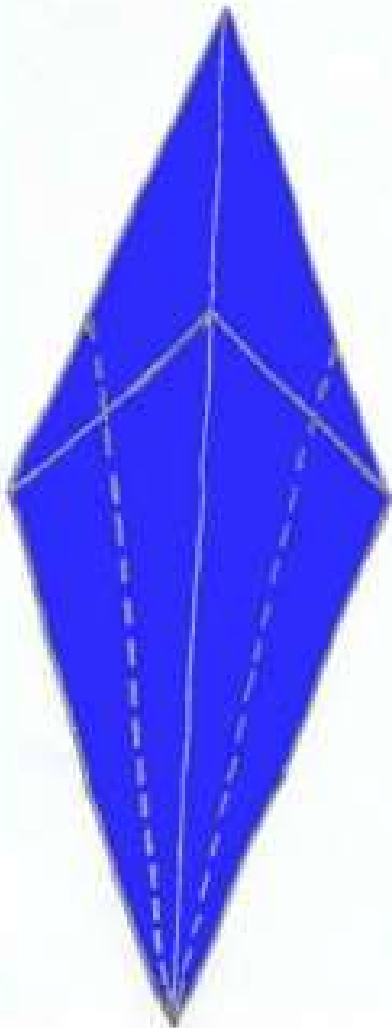
Step #2



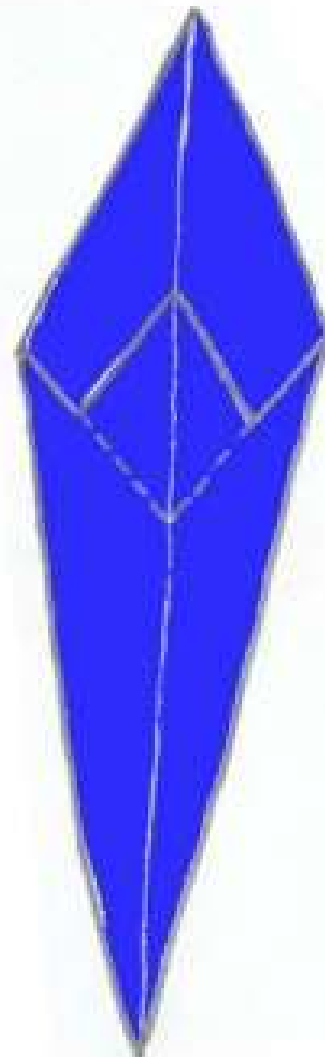
Prefold...

Rabbit ear fold both sides...

Step #3



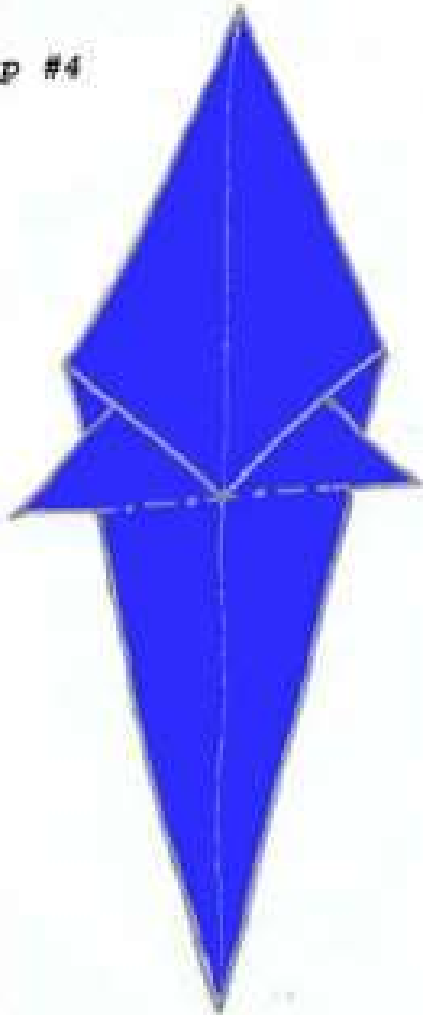
Step #4



Valley fold both sides to centerline...

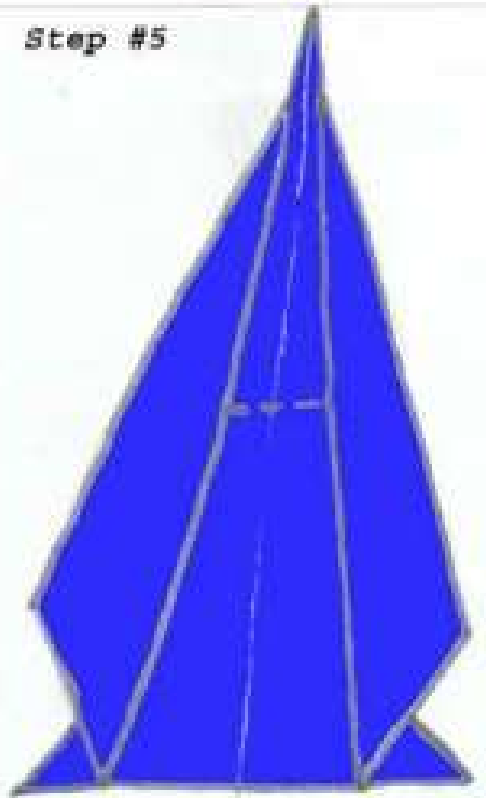
Valley fold flaps over the edge...

Step #4



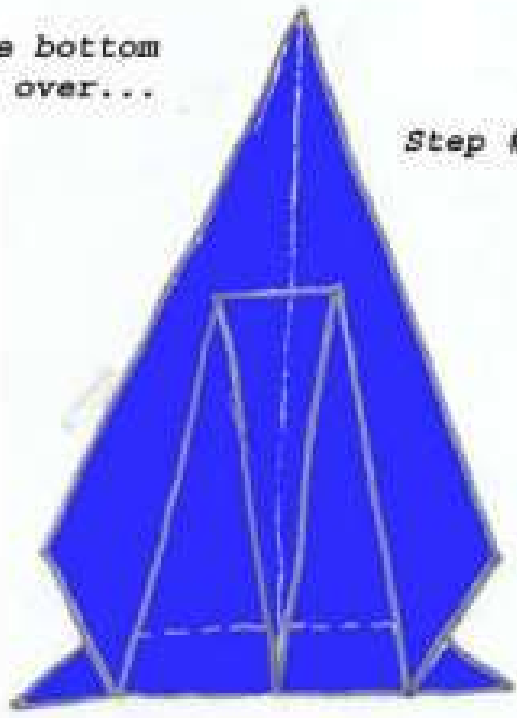
Mountain fold along the bottom of the flaps then turn over...

Step #5



Valley fold the top layer only to the bottom...

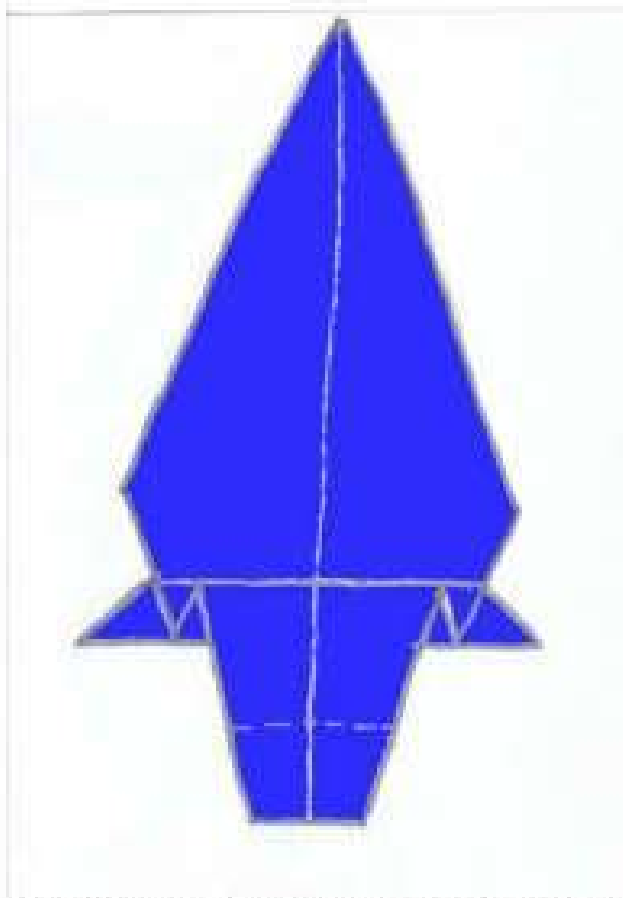
Step #6



Valley fold the middle layer only down approximately 1/4...

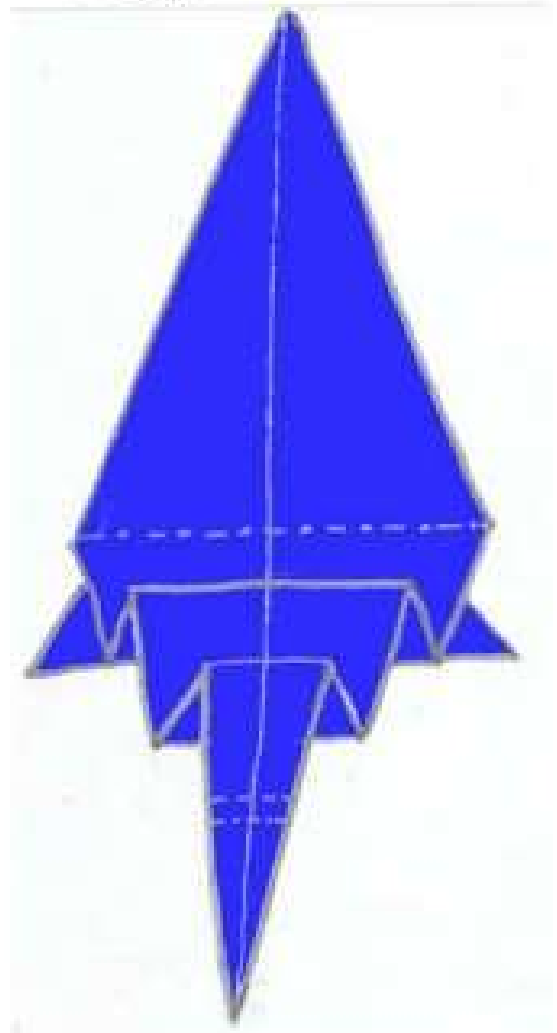


Step #8

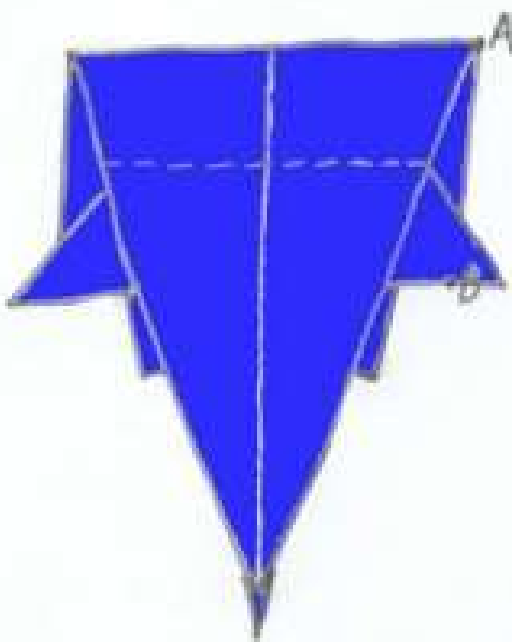


Valley fold the top layer only to the bottom of the model...

Step #9



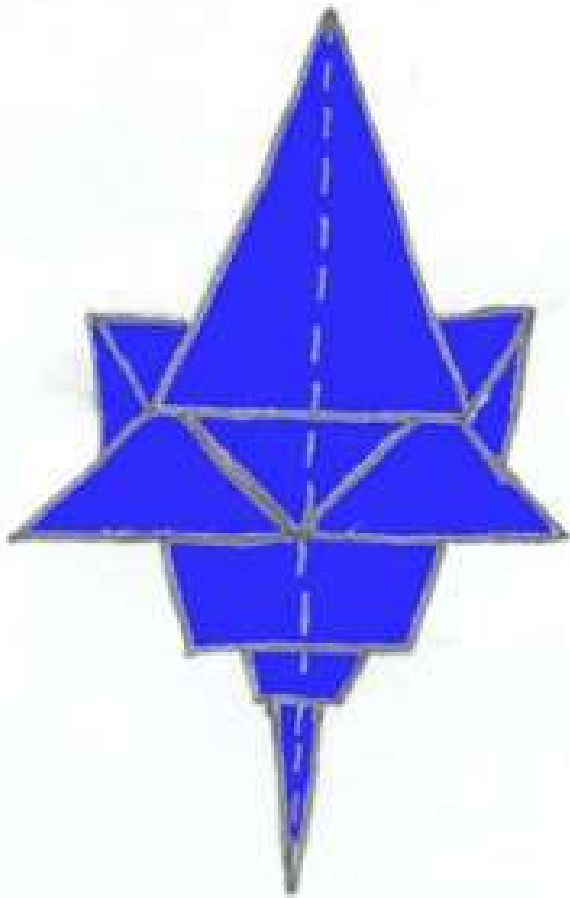
Step #10



Valley and mountain fold approximately 1/8 of the tail forming one more crimp... Mountain fold the two vertices as shown... Turn model over...

Valley fold the top layer only half way between points A and B.

Step #11

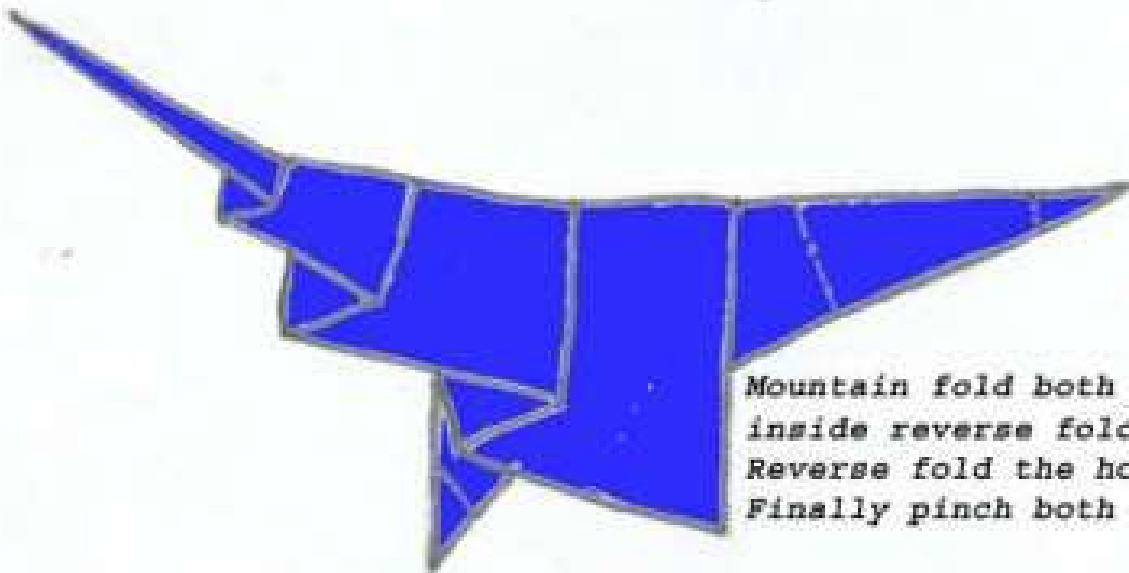


Finished Model!



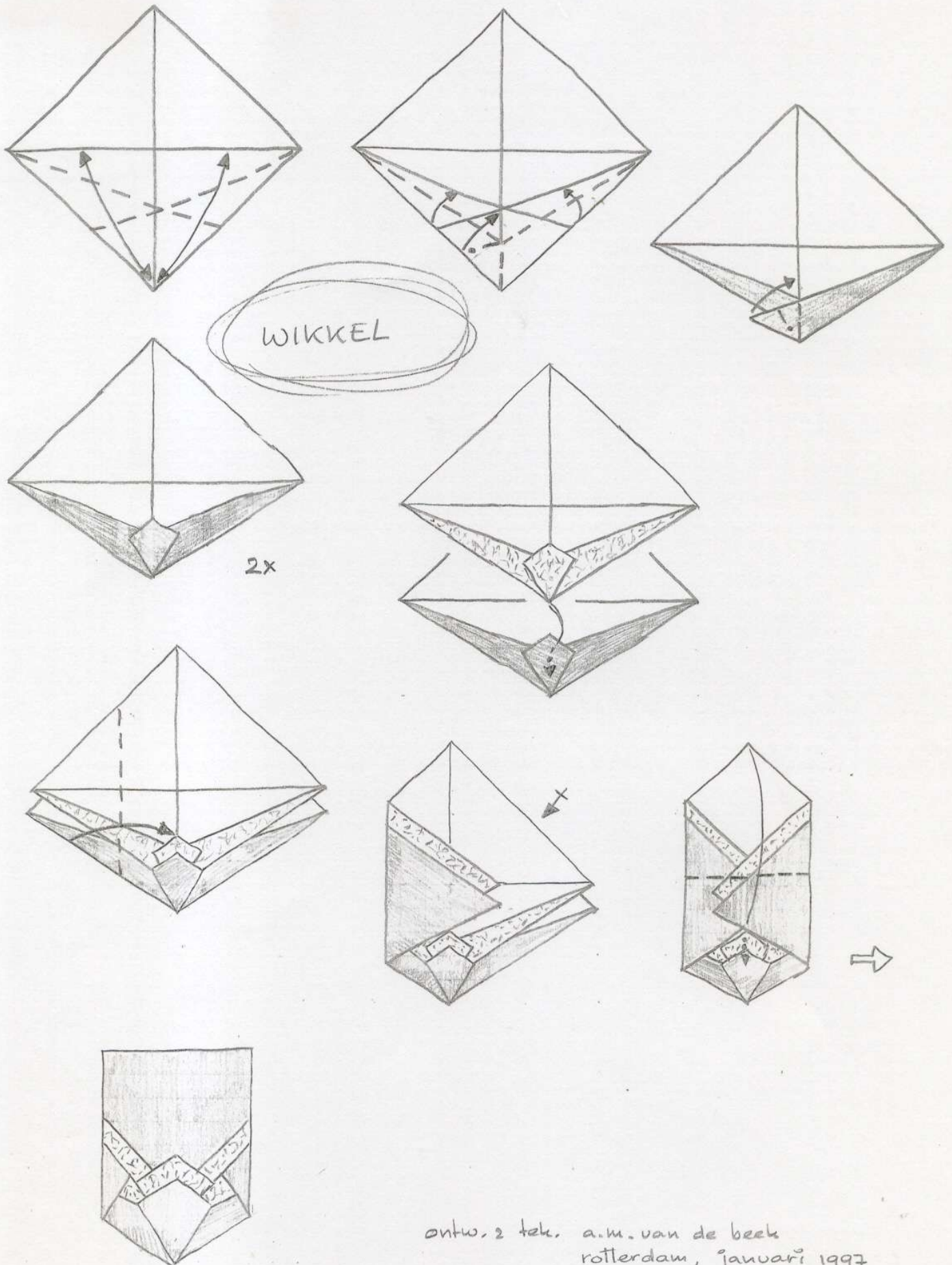
Valley fold along the mid line...

Step #12

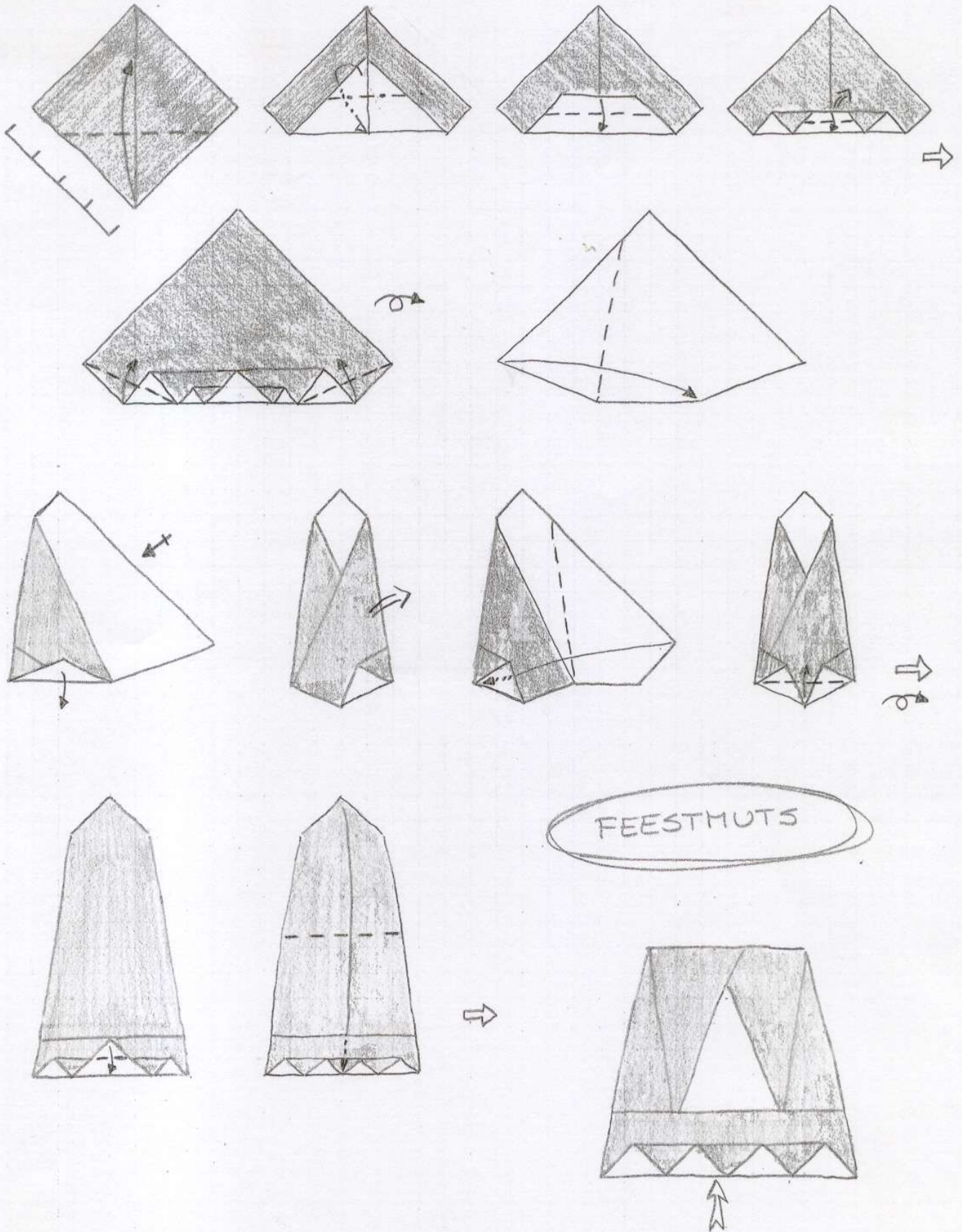


Mountain fold both legs,  
inside reverse fold the head...  
Reverse fold the horn...  
Finally pinch both front legs.

# Gift Envelope by Miranda van de Beek



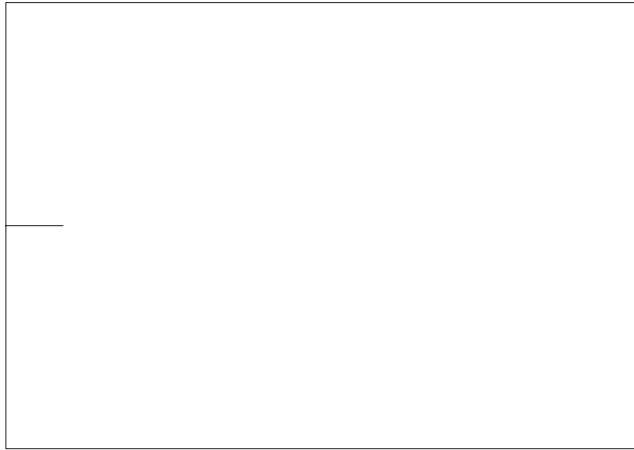
# Party Hat by Miranda van de Beek



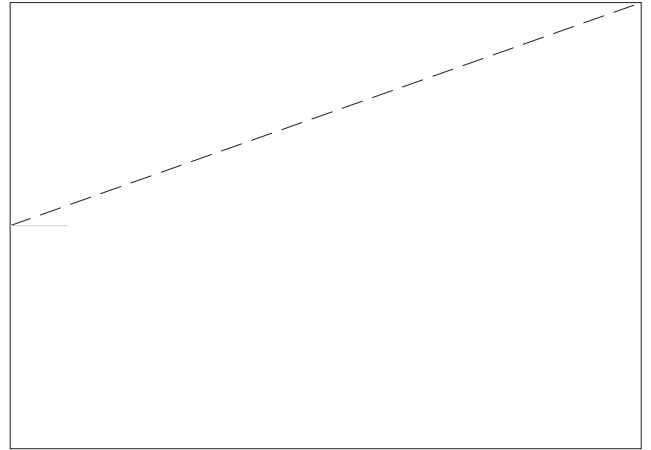
ontw. & tek. a.m. van de beek  
rotterdam, juli 1991

# A Spiral's Flamboyant Shell

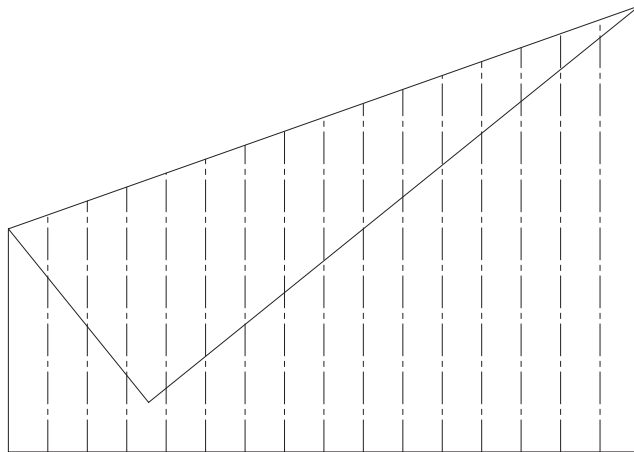
© A.S. Seyffert (Designed & diagrammed)



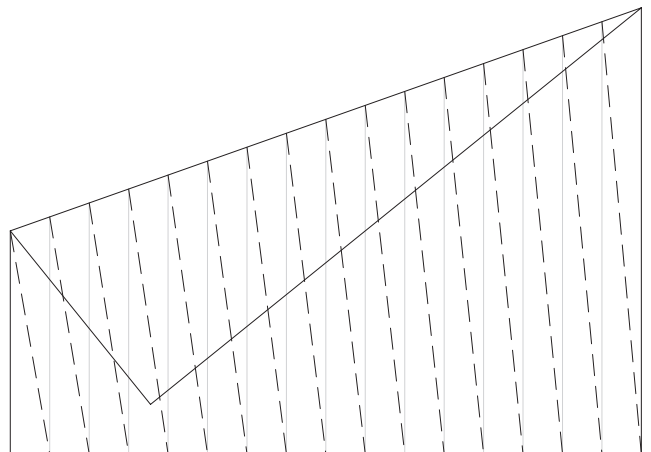
1. Start with any A format sheet a.k.a. a silver rectangle. Pinch halfway along the width.



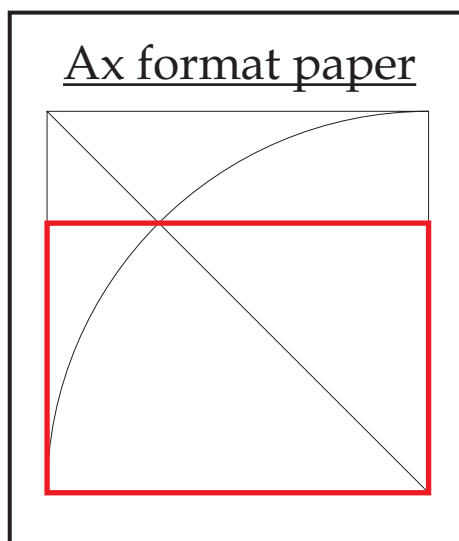
2. Valley fold.



3. Divide into 16 with mountain folds.



4. Connect the points with valley folds as indicated.



5. Collapse along the folds in steps 3 & 4.

## Variations

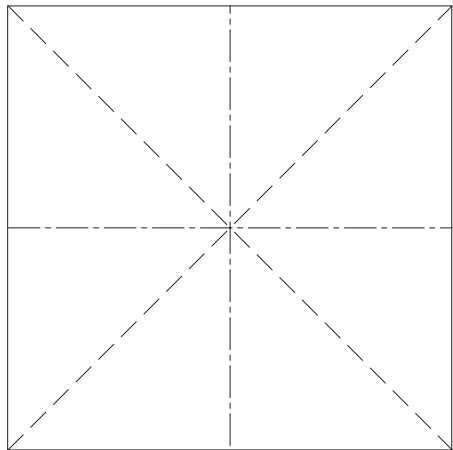
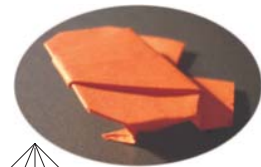
To mirror the finished model about the 90° axis simply mirror the diagrams

To have the coloured flap on the outside of the model, make a mountain fold in step 2.

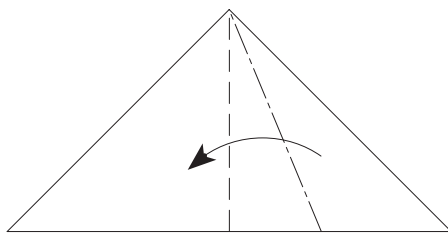
To have a finer structure, divide the paper into 32 instead of 16 in step 3. Be bold and try 64!

# S.A. Jumping Frog

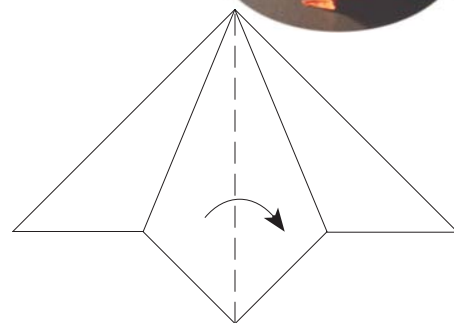
© A.S. Seyffert (Designed & diagrammed)



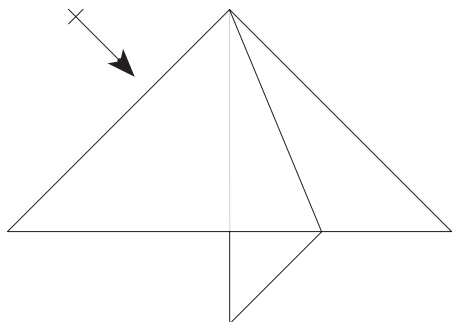
1. Form waterbomb base.



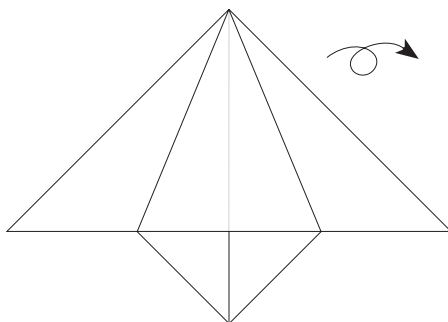
2. Squash fold only the top flap.



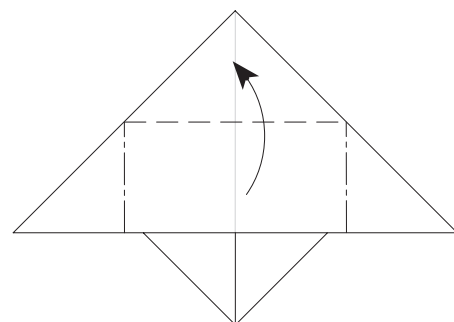
3. Fold the left over.



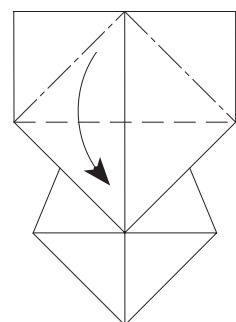
4.



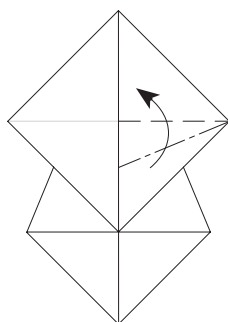
5. Turn over.



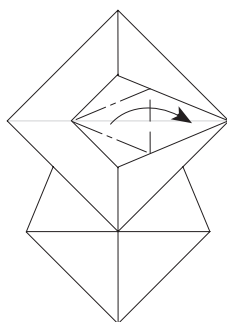
6. Open the top layer into an offset petal fold.



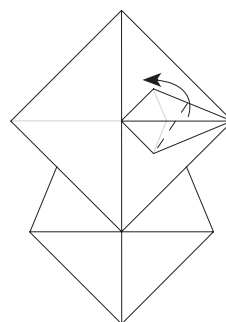
7. Bring the corners straight down.



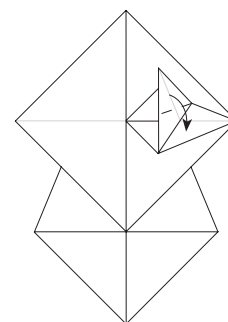
8. Squash the flap you just created.



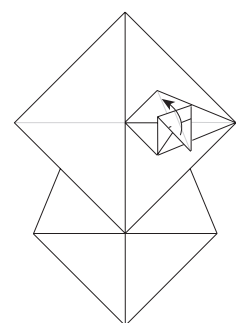
9. Petal fold.



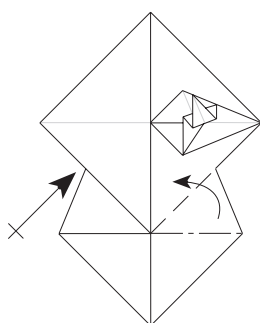
10. Valley fold so that edge meets tip.



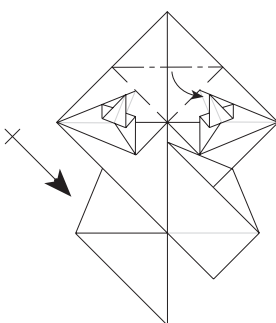
11. Valley fold so the edge points straight down.



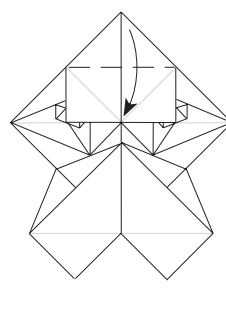
12. Valley fold so the other edge points up.



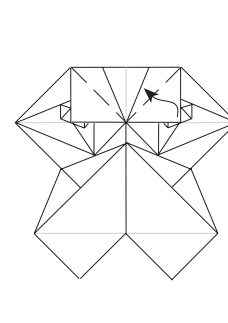
13. Squash to form the foot.



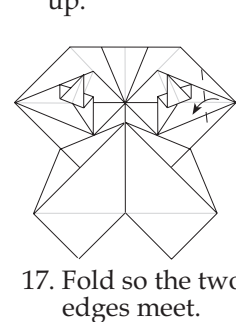
14. Open the top layer.



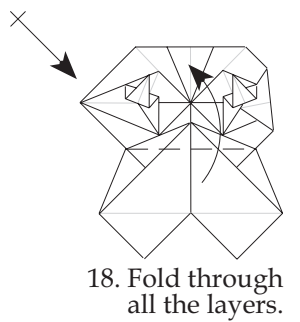
15. Valley fold.



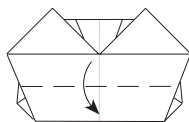
16. Tuck the flaps into the pockets.



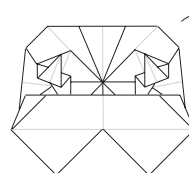
17. Fold so the two edges meet.



18. Fold through all the layers.



19. Be careful not to fold too far.



20. Turn over & viola!

Adjust the legs to fit the above picture. To jump press down on the frogs tail-bone in the direction of the v formed by the legs. You should be able to hold it in the 'cocked' position, then just slip off your finger and BANG!

# Umulius Dodecanum

A.S. Seyffert (Designed & diagrammed)

x 6 (2/colour)

A



How to:

1. To achieve the required size, divide any A format (A4 etc.) page into eighths lengthwise and cut off three of those eighths. (or print this)

2. Find lines E (baseline) and F first by folding a diagonal and making horizontal folds at the intersection of this diagonal and the first and second fifths.

C

3. To get the  $\theta$ -angled line, as well as line D (next baseline), place point a on line b and fold through point c. Bisect this angle to get  $\theta$ .

4. Fold line B through the intersection of this line and line e, and line D through the intersection with line d.

5. Make the opposing angled line by connection.

6. Repeat steps 3-5 4 times, and a fifth without step 5.

7. Fold a horizontal line 3 units from C (Use a diagonal like in step 2) and fold a  $\theta$ -angled line. (TIP: Try making it downward)

D

8. A is the intersection of this line with the vertical line 2 units away from the start of the  $\theta$ -angled line.

E

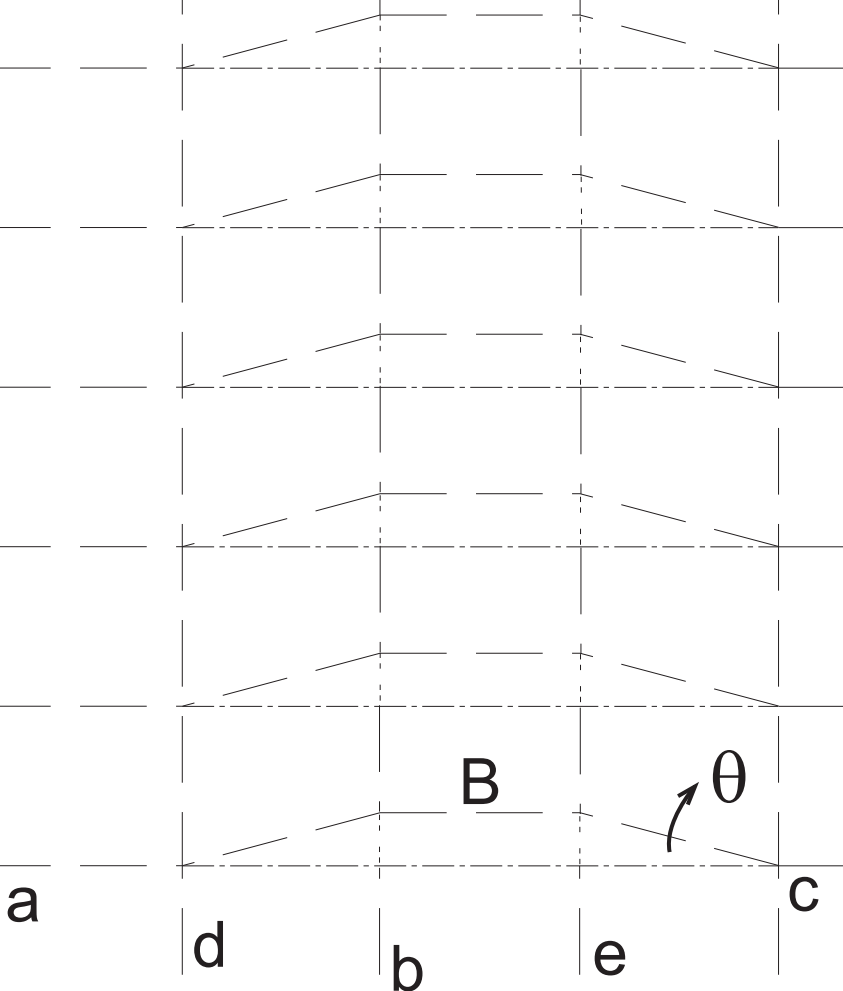
- The construction of the model is further similar to Thoki Yenn's original umulius rectangulum.

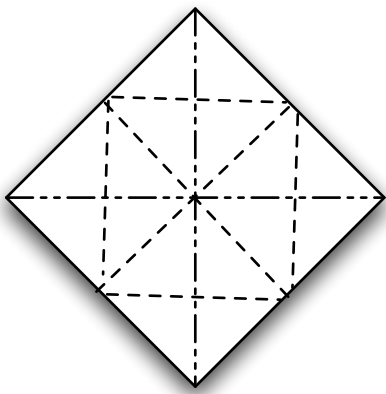
F

© A.S. Seyffert  
e-mail questions, comments  
and photo's to:

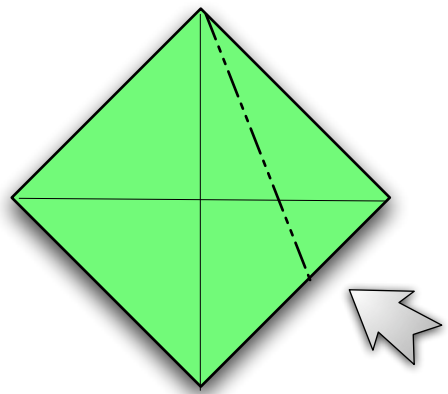
G

20126999@student.nwu.ac.za

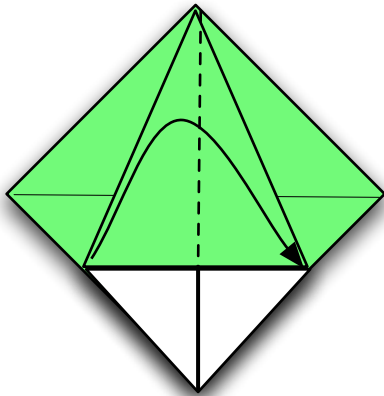




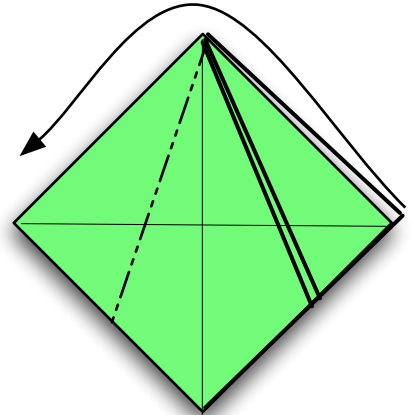
Start Colour sided down  
Precrease Preliminary Base  
Fold and Unfold four corners



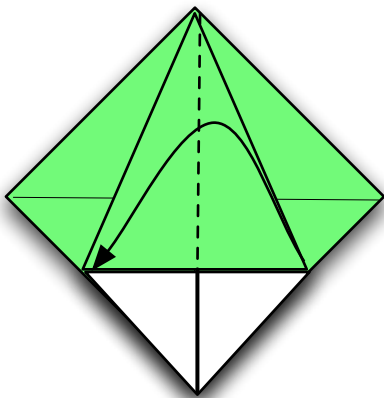
Squash fold flap



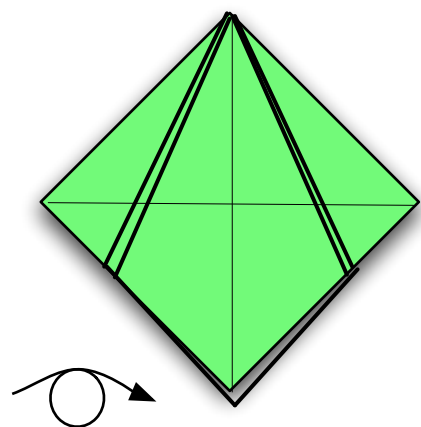
Fold Flap in half over to the right



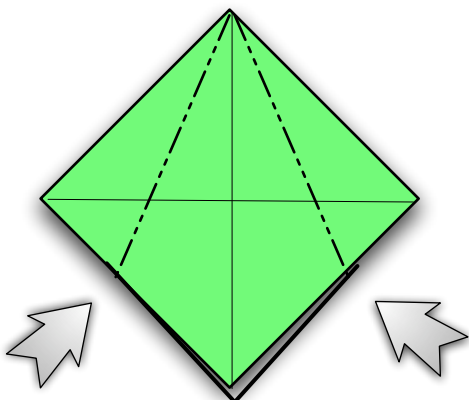
Swing Flap behind over to left  
Squash Left Flap



Fold Flap in half over to the Left



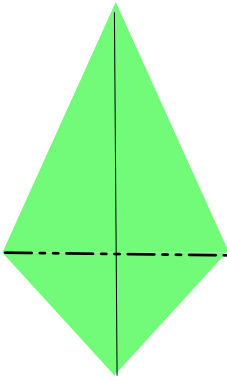
Turn Model Over



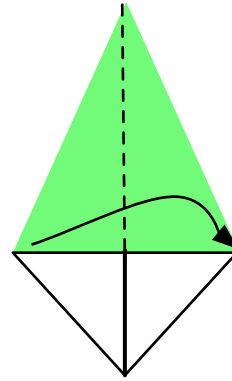
Repeat Squash folds on this side

Simple Tree by David Jacobs  
about 1993

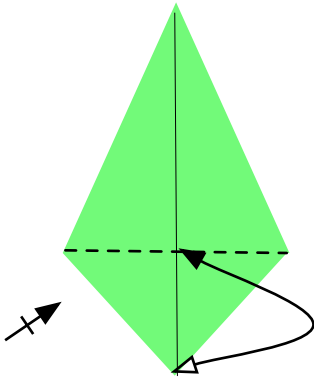




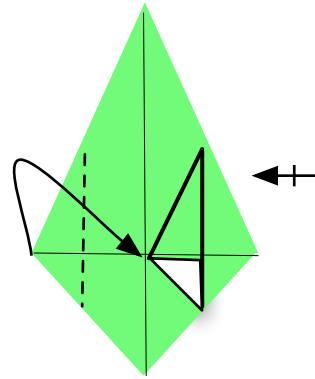
End up with 4 flap each side  
Mountain fold front flap under itself  
Repeat On rear



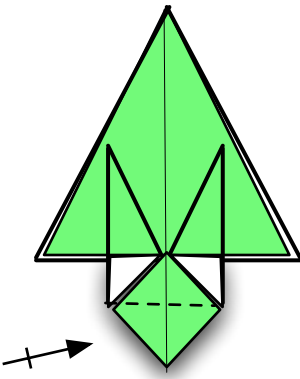
Fold 2 flaps over in the front  
And 2 flaps over to the left behind



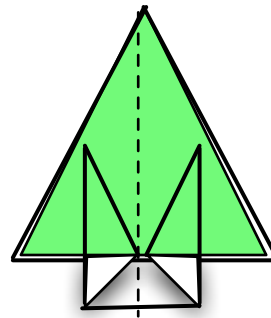
Valley fold AND unfold front flap  
Repeat behind



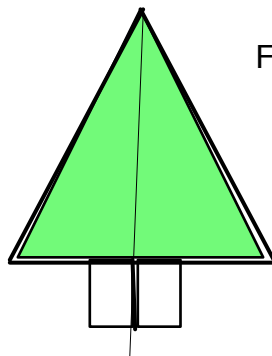
Fold edge along crease made in last step to centre  
Repeat on the right  
Then Repeat behind



Valley Fold top flap in half  
Repeat Behind



Valley Fold 2 flaps over to the left in front  
Valey fold two flaps over to right behind



Finished tree, you can easily make it stand  
and appear 3 D

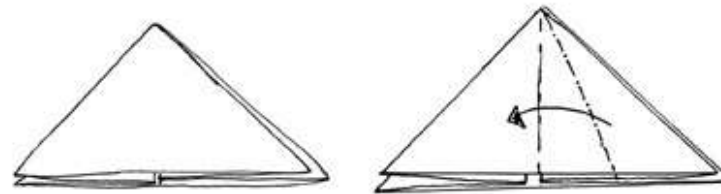
# Engel

Design: Nele Hatoum  
Diagramm: Nele Hatoum



Ausgangsform  
zusammengeschobenes Dreieck

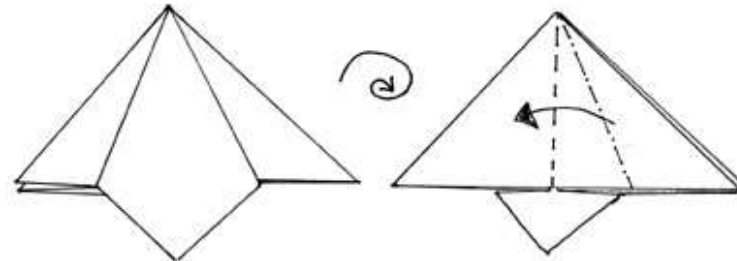
1.



2. linke obere Doppellage öffnen  
und mittig flachdrücken

Ergebnis von 2.

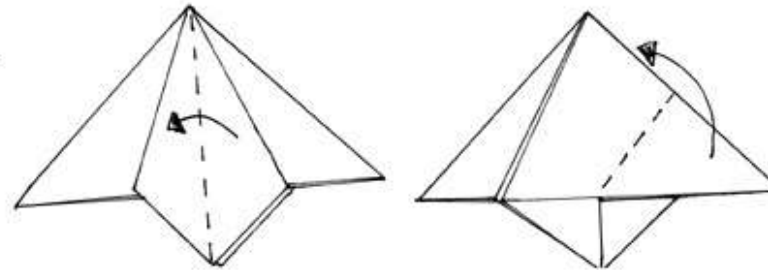
3.



4. umdrehen und auf der anderen  
Seite wiederholen

die rechte Seite der vorderen  
Lasche nach links klappen

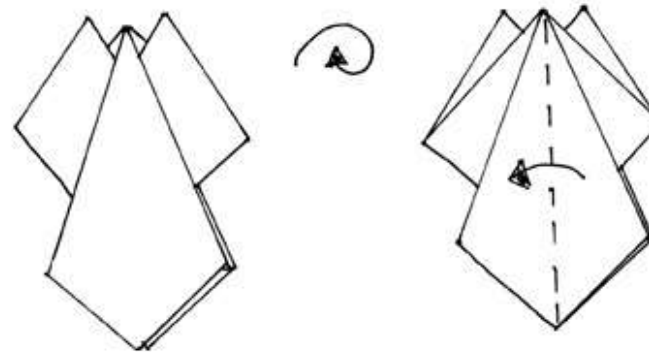
5.



6. rechte Lasche nach oben falten  
knapp neben die obere Spitze,  
linke Lasche wieder nach rechts  
Schritte 5. und 6. auf der linken  
Seite spiegelgleich wiederholen

Ergebnis der Schritte 5. und 6.

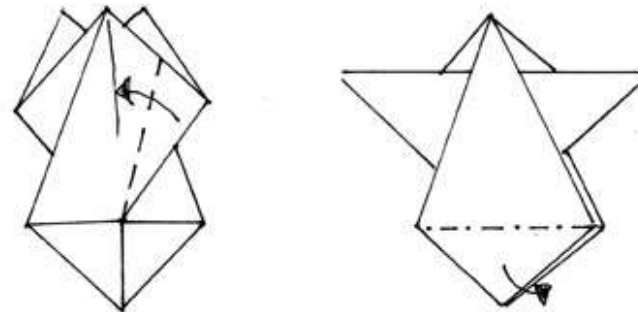
7.



8. Modell wenden und obere rechte  
Lasche nach links klappen

Außenkante des rechten Flügels  
auf die Senkrechte falten,  
dabei den hinteren Teil nicht  
mitfalten, sondern "rausschnipsen"  
lassen, links wiederholen

9.



10. Die unteren Dreiecke nach innen  
fallen, dabei die inneren Lagen  
"Verstecken"; zum Schluß umdrehen  
und die "Frisur" ein wenig ausformen

# Rat

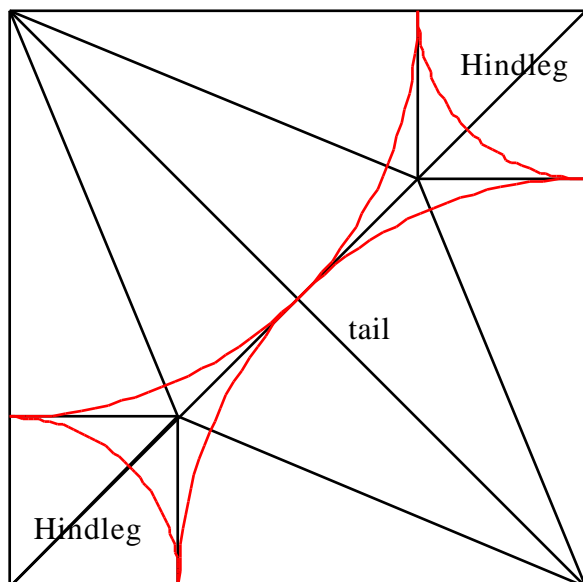
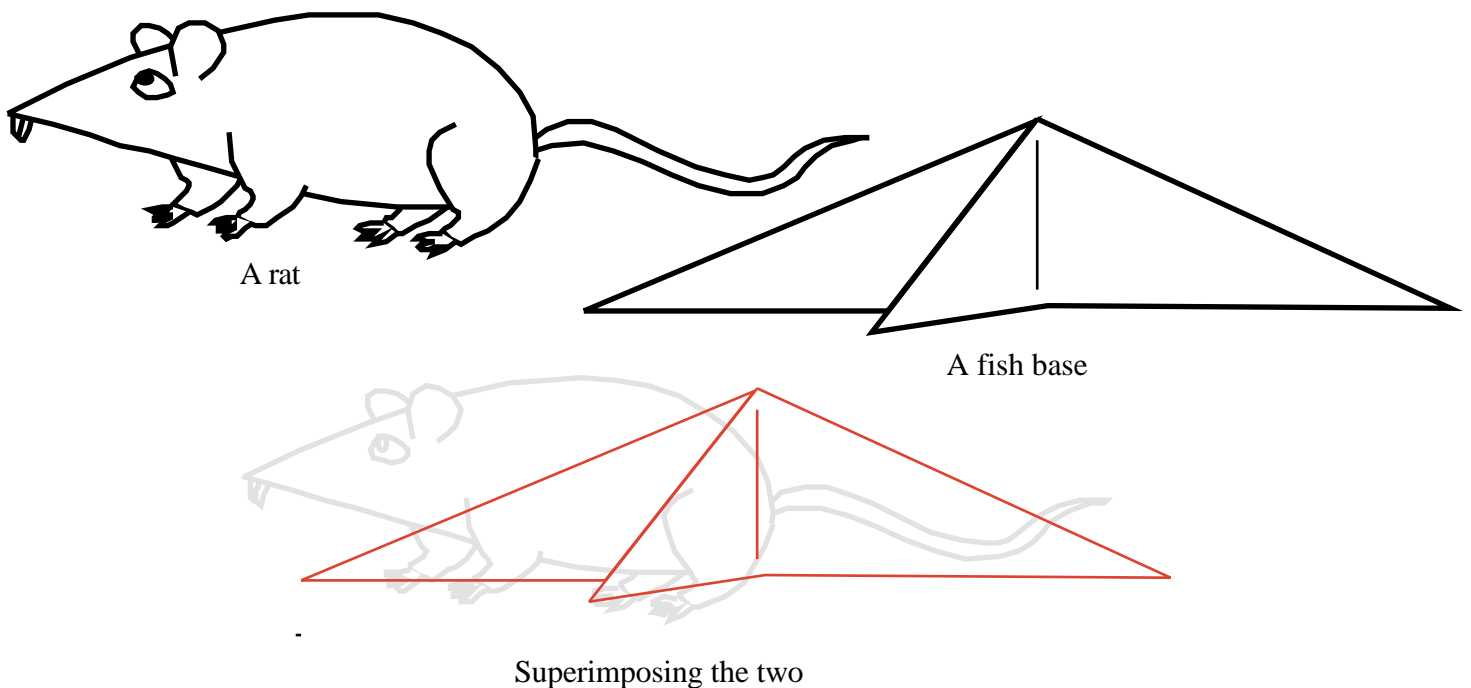
Eileen Tan  
Dec 2006



While mathematical techniques like circle packing can be a powerful tool to design models with, many models without multiple appendages can be designed with other tricks instead. Here, I'll show how it's possible to build upon a simple base to produce a little lab rat. Let's list down what we want for the model first:

1. Closed back. Somehow, rat models, or many other rodent models don't look too good with open backs.
2. Long tail.
3. Short legs with claws.
4. Rodent teeth.

If we start with the simplest base possible - the fish base - we see that with a bit of imagination, it already looks somewhat like a rat:



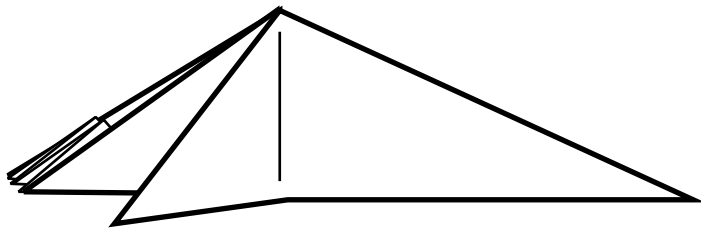
Crease pattern of a fish base

Yes, folding the fish base in the above fashion gives an open-backed model for now, but we can always fold it the other way to give a closed back. This means that we need to be mindful of the flaps for the legs and ears, since we'll need to make these long enough to peek out from under the closed back.

The fish base will give us three of the flaps we need: a long one for the tail, and two shorter ones for the hindlegs.

Now, we'll need to figure out how to transform the remaining flap into a head and two front legs.

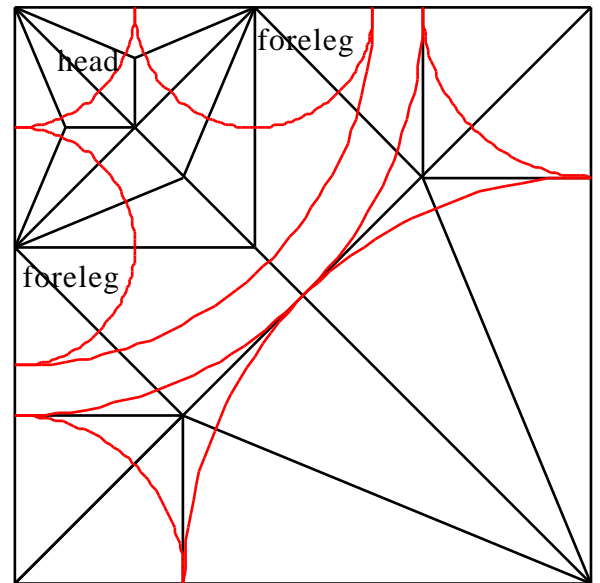
Splitting the long flap into three would give us three shorter flaps. Two of these could be the forelegs and the third would be the head:



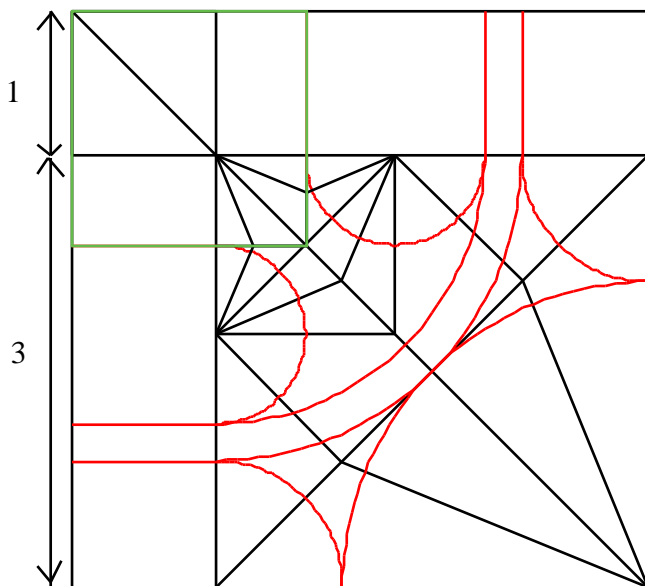
Splitting the long flap

Obviously, we're going to need to add quite a bit more paper for the head. A glance at the crease pattern at this stage (right) shows that we can do this simply by adding two grafts; one at the top and one at the left.

These two grafts would also give us enough paper for the claws.



Crease pattern after the split



Crease pattern after adding two grafts

How much paper should we allocate to this graft? That depends on how you want the head to look, and how long you want the claws to be.

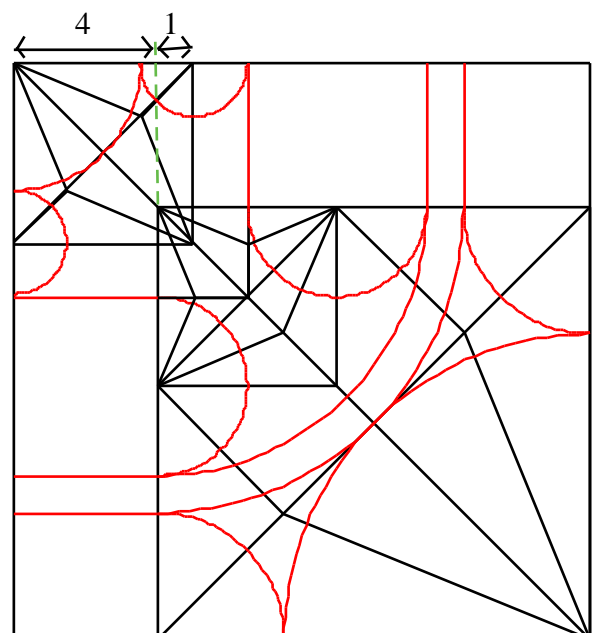
Some experimenting with a possible head structure (described further on) shows that a strip graft width that is a quarter of the length of the square works relatively well.

Now we need to work out something for the head region (left, enclosed by the green box). We'll need one long flap for the snout, and two shorter ones for the ears.

This sounds like another fish base, doesn't it?

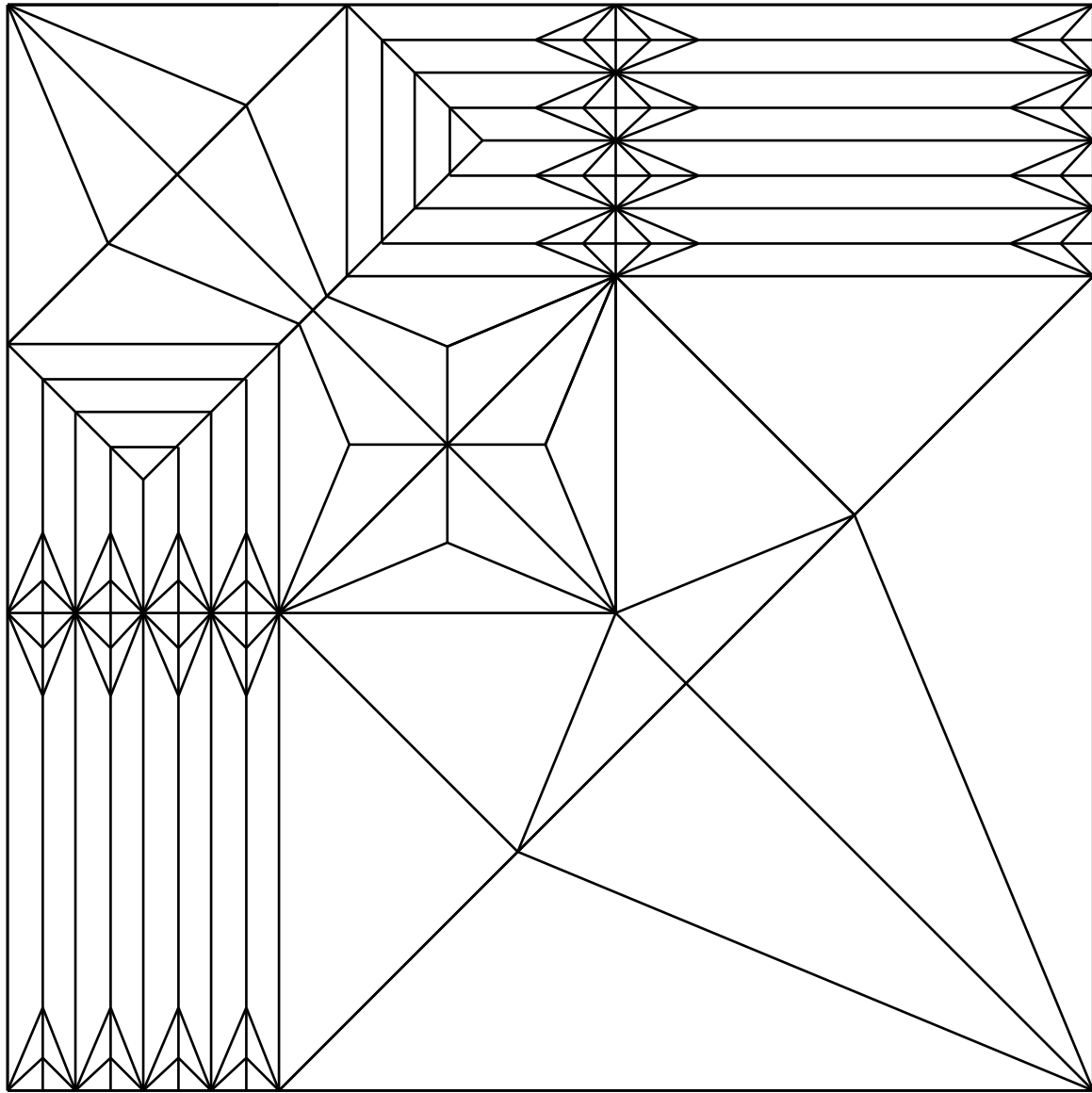
Another judgement call: where should the landmarks or the fish base be? Again, after a few test folds, basing it off a division of the graft width works nicely. We'll need to divide the grafts lengthwise into quarters for the claws anyway, so it's easy enough to mark off the position of the fish base with this (shown on right).

So, now we've got all the major flaps in. The creases required to collapse this into a flat base can either be determined mathematically, or experimentally; ie just fiddle with it until it collapses into something flat.

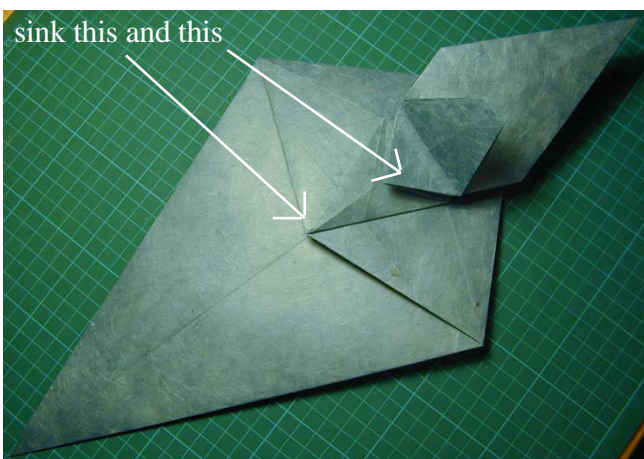


Crease pattern after inserting a fish base

So finally, we arrive at a finished crease pattern for the rat:

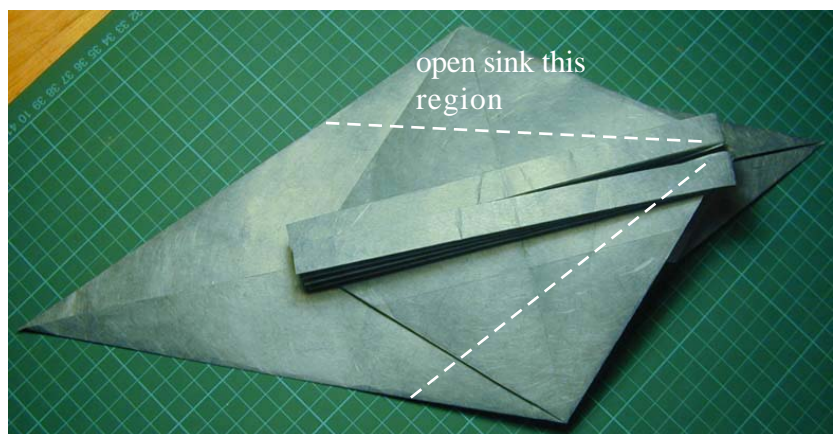


Rat crease pattern



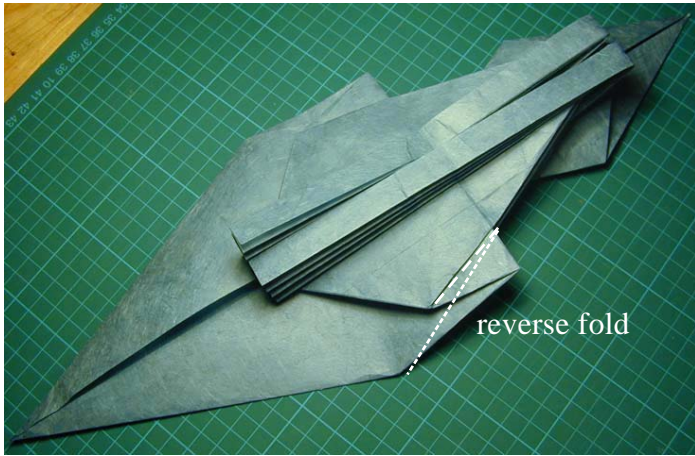
Top of collapsed base

The two short flaps along the back can be closed sunk to make the back look less cluttered.

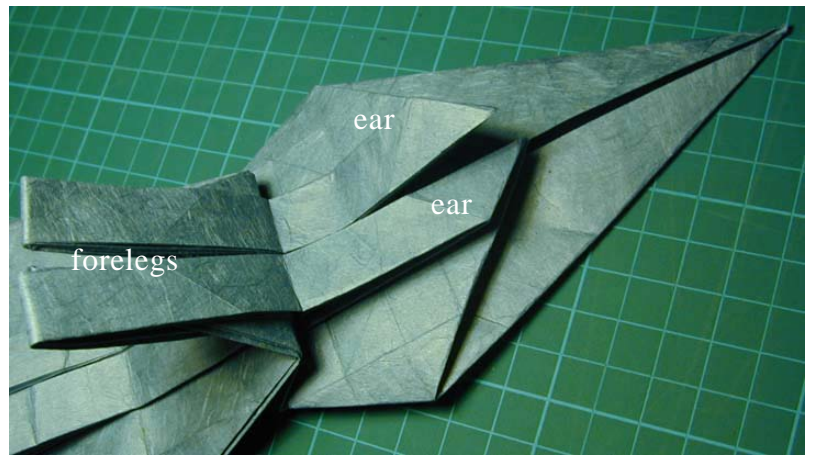


Bottom of collapsed base

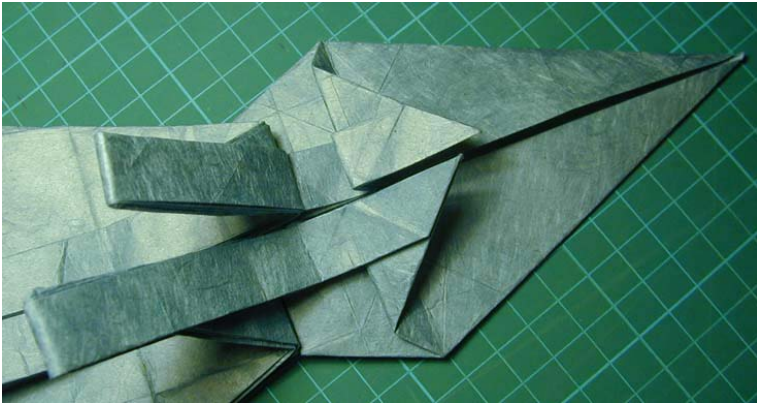
Open sinks are used to narrow the forelegs (along the angle bisectors).



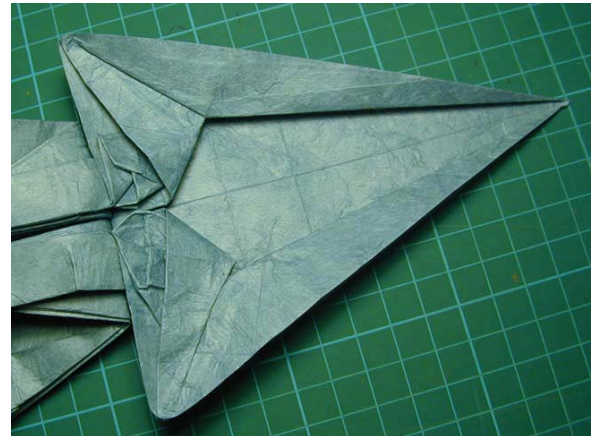
Reverse fold the bits still sticking out.



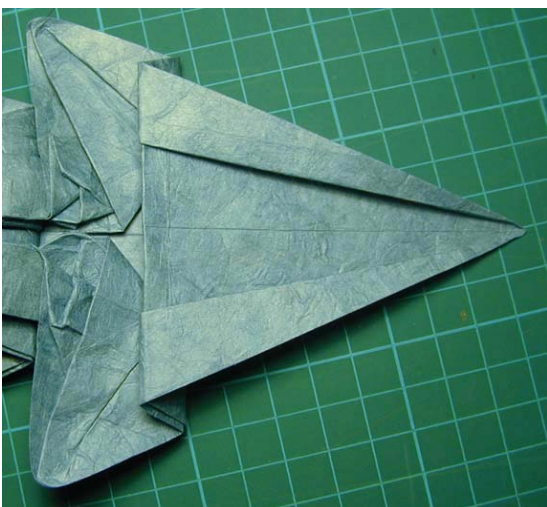
We'll now work on the head and front body. The foreleg flaps are just a bit too short, but they can be lengthened. Conservation of paper dictates that the extra length must come from the ears, so those flaps will end up being shorter.



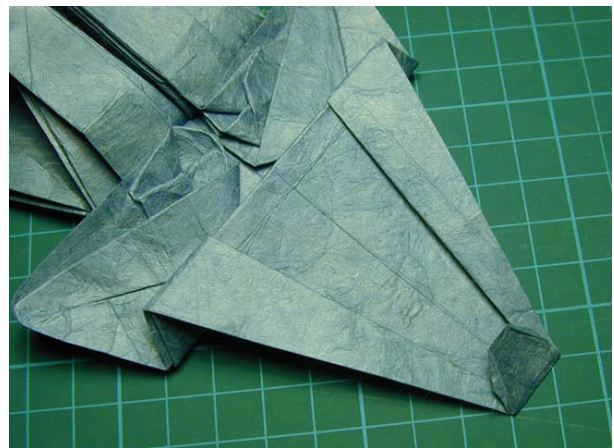
Here's how the forelegs and ears look after the legs are stretched backwards slightly.



The ears are valley folded outwards as far as they can go. This causes a few nasty looking gussets, sinks and other crumpled areas to be formed.



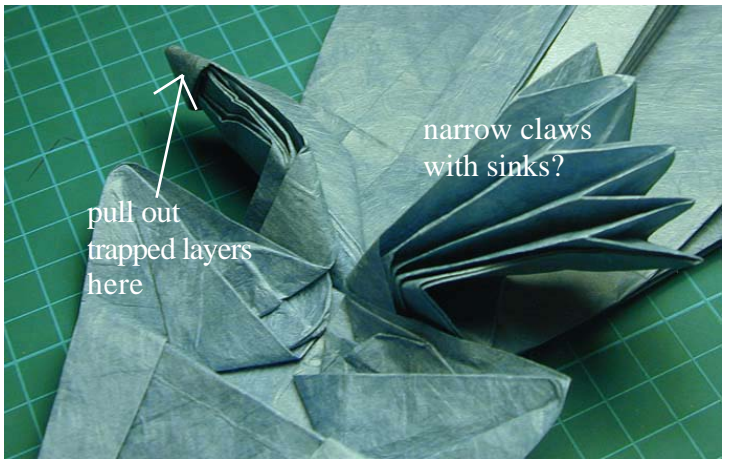
A simple pleat fold. This later allows us to bend the ears up more, and lock the head in place.



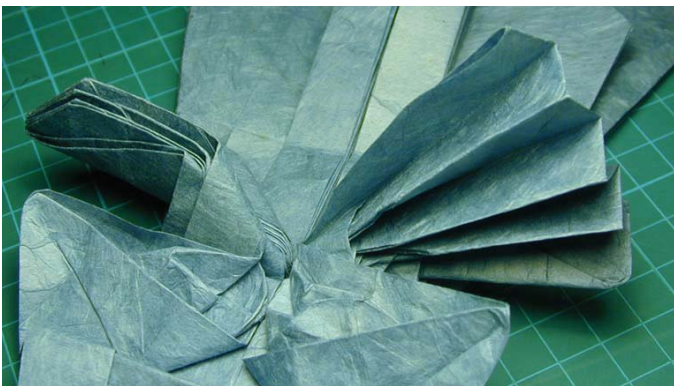
Bend the tip of the flap back and spread to form teeth.



We'll work on the legs next, starting with the ones in front. Reverse folds bring them out to the side.



The trapped layers for the claws can be pulled out and then narrowed with sinks. However, this will mean that the claws will be nested together instead of being splayed out.



Or, we can do a combination reverse-fold/sink to spread the pleats out (cf hands of Kamiya's wizard). Narrowing the claws will now be easier too; just a series of reverse folds instead of sinks.



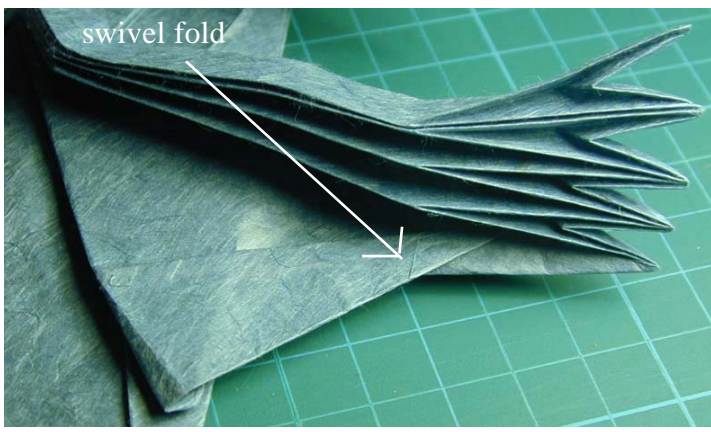
The hindlegs can be valley folded out, but this doesn't look that good since the pleated graft region will be visible on the outside.



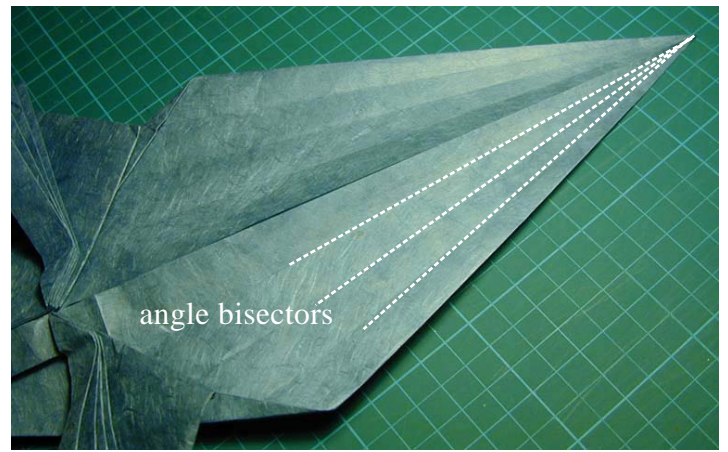
Reverse folding the legs will allow the pleated graft region to stay hidden. The claws are now trapped, but there's a solution for this!



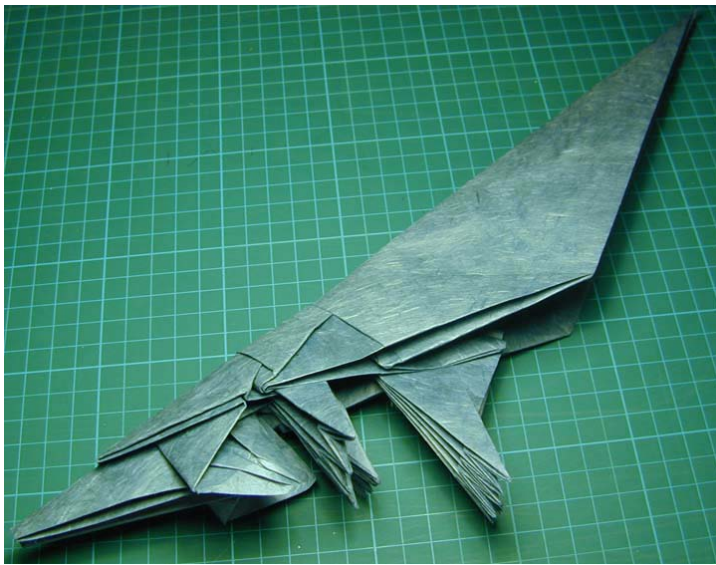
Just sink and turn each of the pleats inside out! (It's equivalent to doing a few outside reverse folds simultaneously).



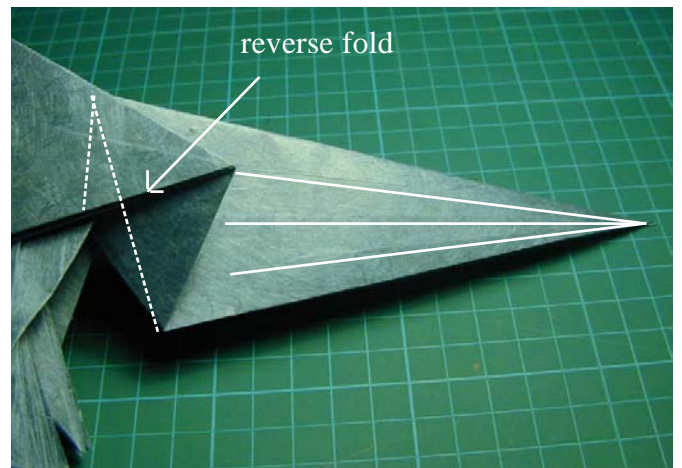
A swivel fold completes the last claw of the hind legs.



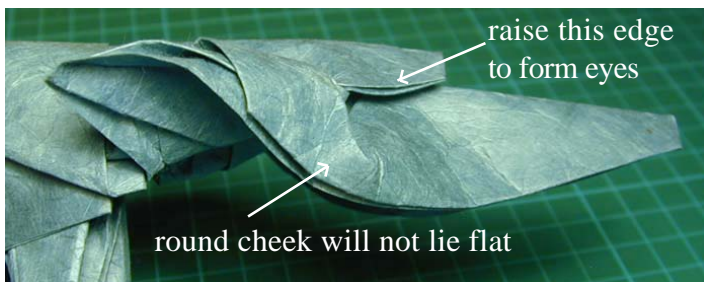
This would also be a good time to precrease the angle bisectors of the tail flap.



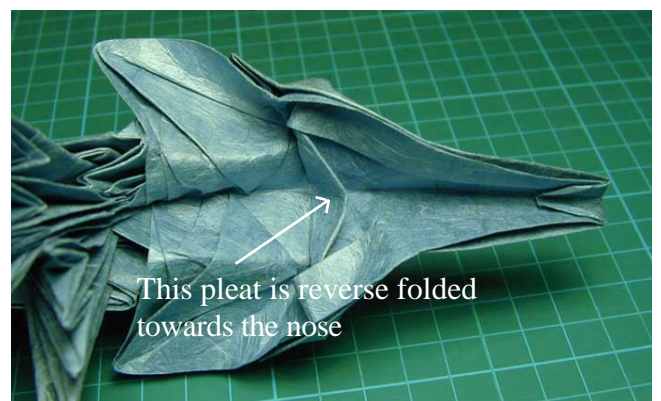
The model is finally mountain folded in half.



The tail flap is crimped. A reverse fold rounds the rear end off before the tail is narrowed by mountain folding it over and over. This method of narrowing the tail is preferred over sinks, which produce too many new edges (we want a relatively smooth, unbroken tails, so edges would not look quite right).



The head is shaped next. First, the ears are folded up as far as it will go. The single pleat formed right in front of the ears earlier will spread out; this is turned inside out to form a rounded cheek.



The flap for the eyes will have an unfortunate tendency to lift upwards, but this can be locked in place by bending the single pleat beneath.



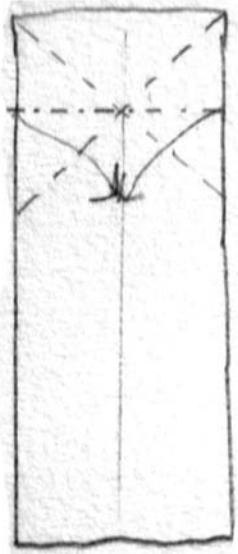


Two small valley folds form the nose, and the teeth are slid out from underneath.

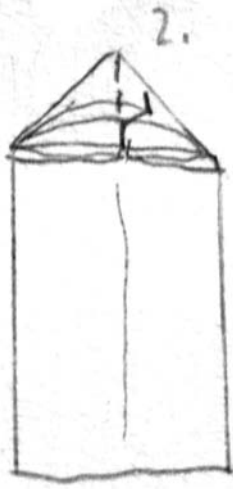
There's still the claws and legs that need to be reverse folded and crimped into place, and a dozen more shaping folds here and there. And then we're done!



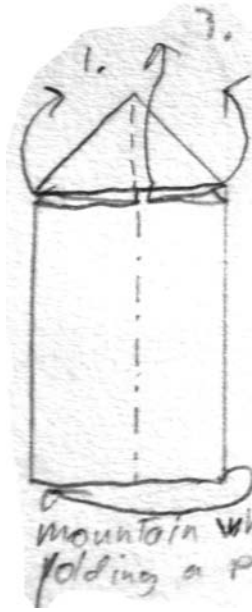
# Crane Pop by Aaron Krive



1.



2.



Mountain white, folding a preliminary



4.

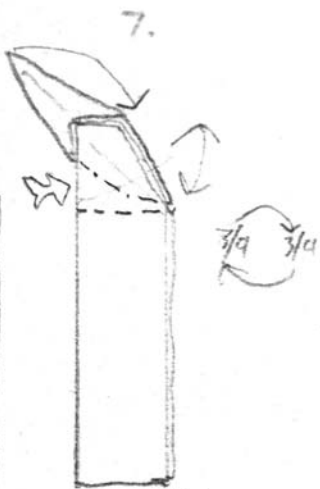


5.

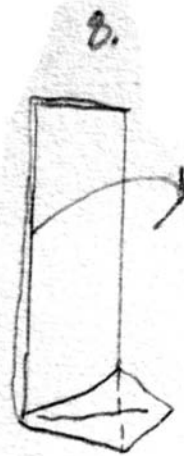
Reverse fold



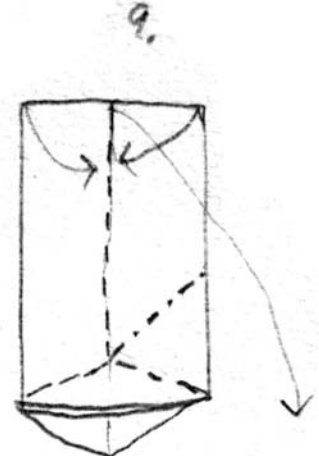
fold and unfold



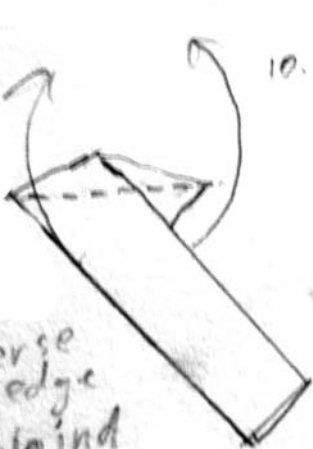
Reverse in and out



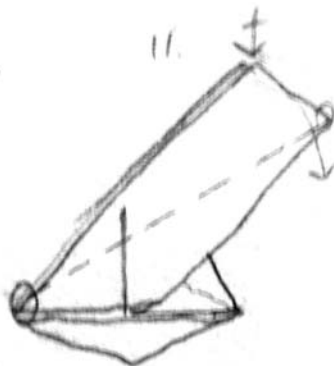
8.



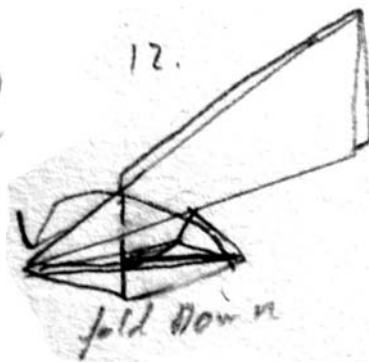
Rabbit Ear



Reverse on edge behind



valley RB

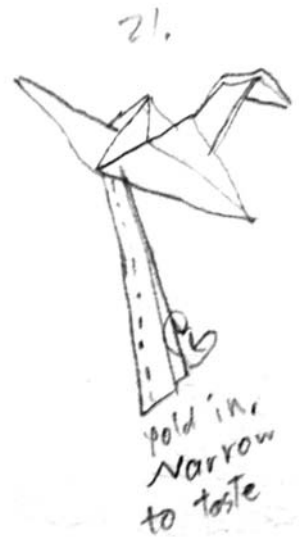
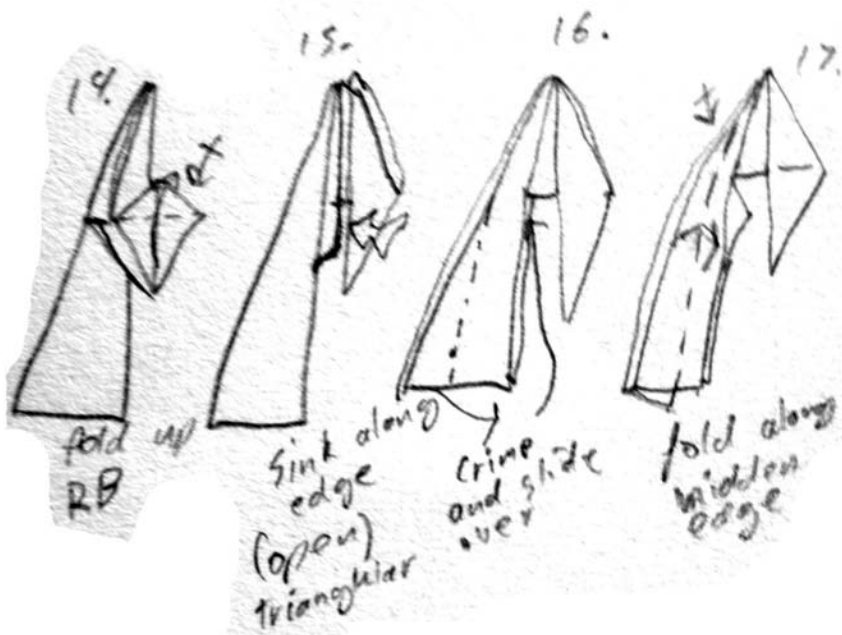


fold Down

$\frac{1}{2}$   $\frac{1}{2}$



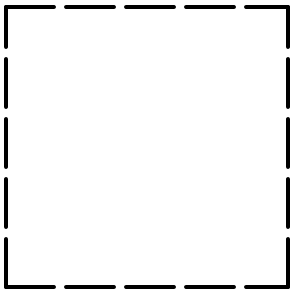
1. fold over  
2. reverse second flap



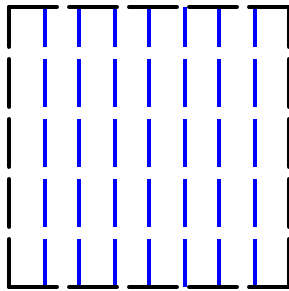
Designed by Aaron Krive  
 Diagrams by Aaron Krive  
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 other uses.

# Art Deco Butterfly by Joshua Koppel

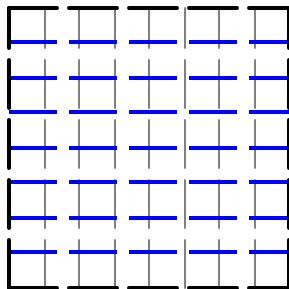
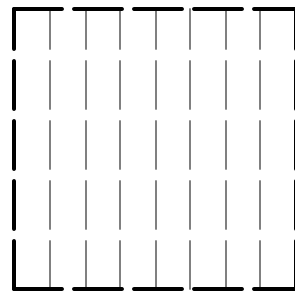
I was working on a human figure when I discovered this butterfly lurking in the paper on December 9, 2006.



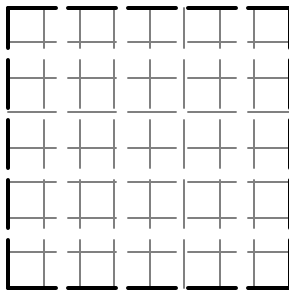
Begin with a square



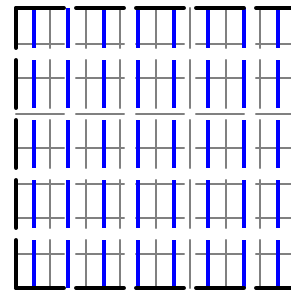
Crease into 8ths vertically



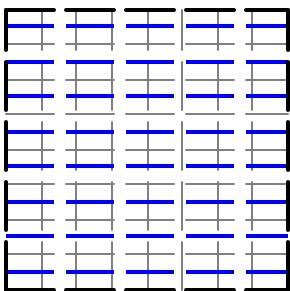
Crease into 8ths horizontally



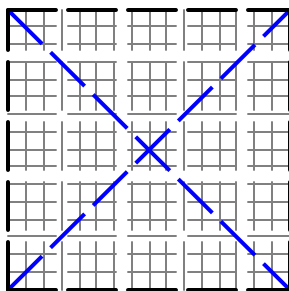
Turn over



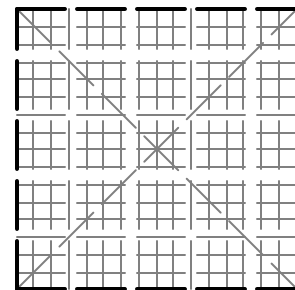
Add 16ths vertically



Add 16th horizontally

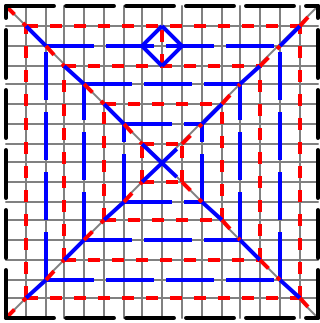


Crease diagonals

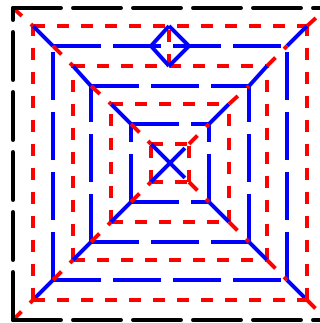


Final crease pattern

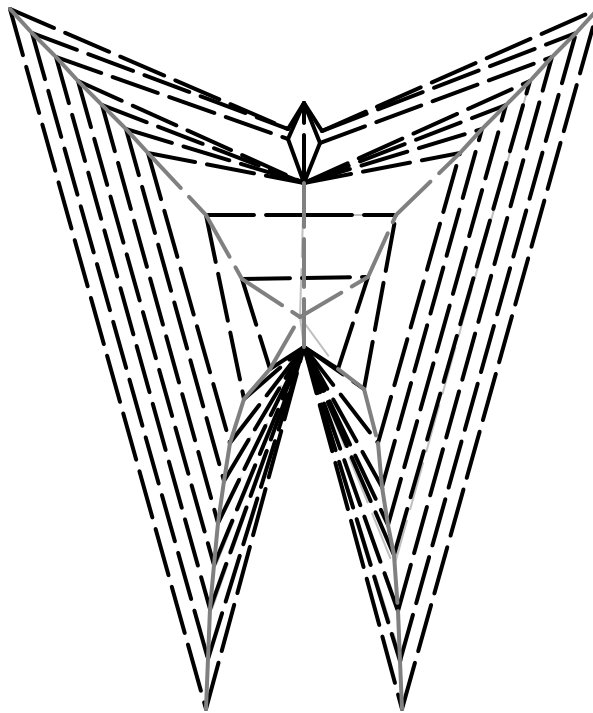
# Art Deco Butterfly by Joshua Koppel



Collapse along creases and add creases for the head

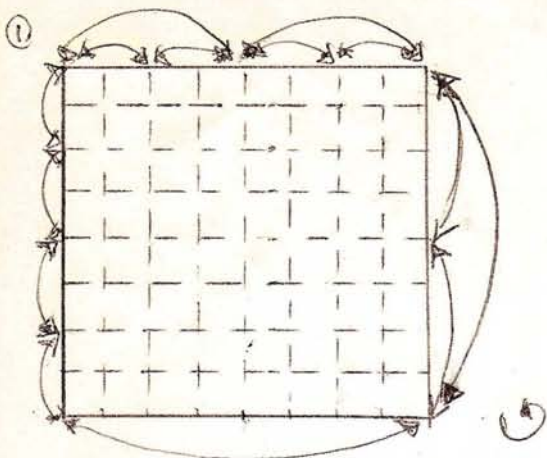


Previous step shown without existing creases

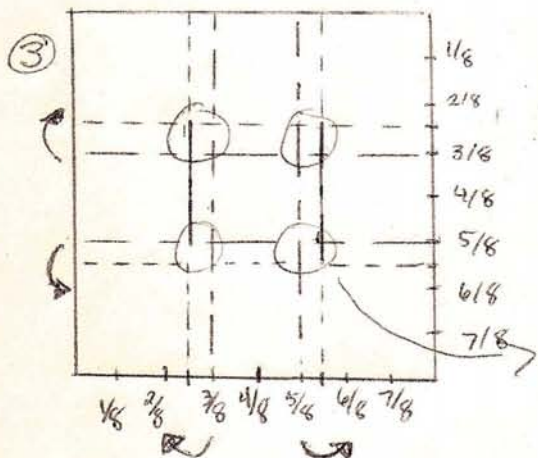
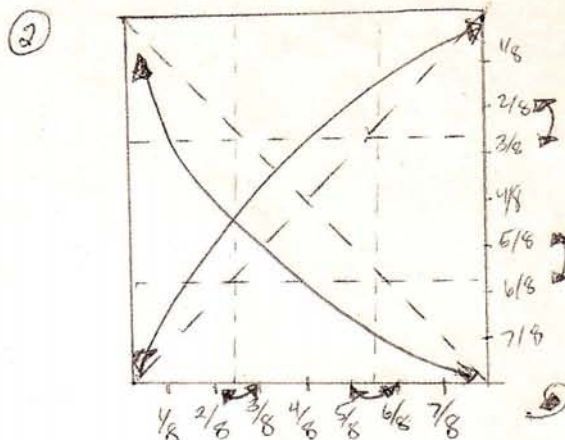


The final Art Deco Butterfly

Collapsible Box (Christine Edison)  
creative Commons Copyright

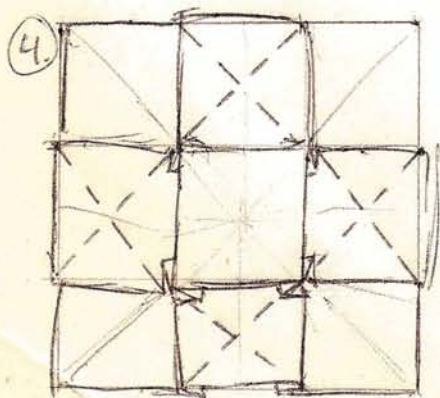
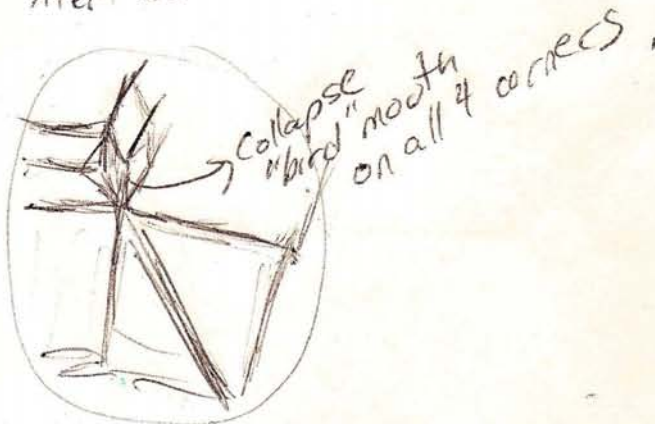


Fold in eighths horizontally and vertically. White side up.

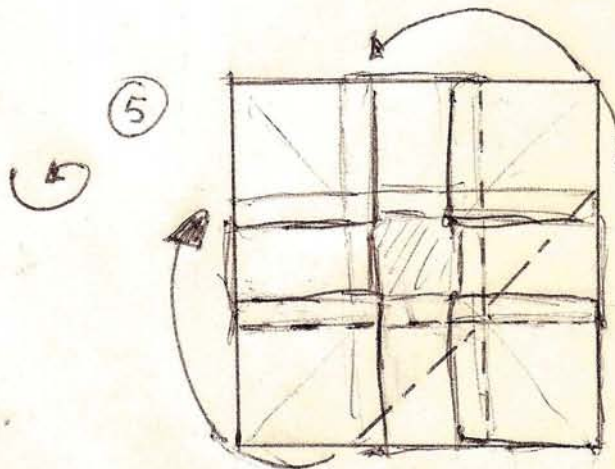


These will not initially lie flat. You will flatten it and have 9 equal squares.

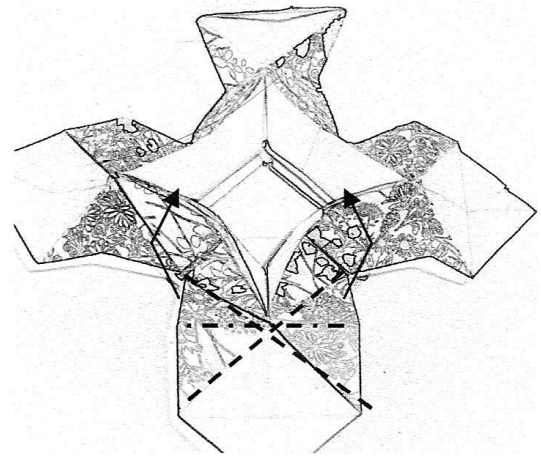
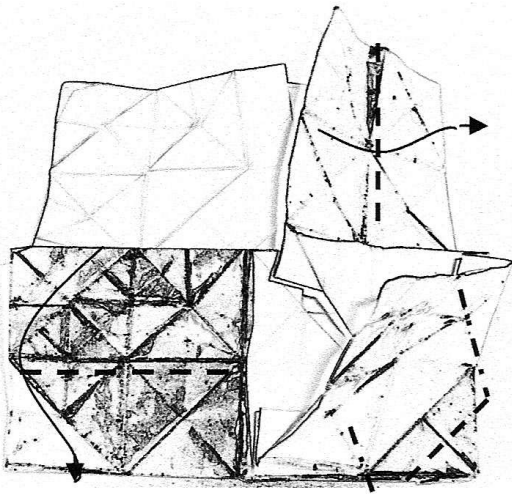
After 3D



View after collapsed, make creases as shown.

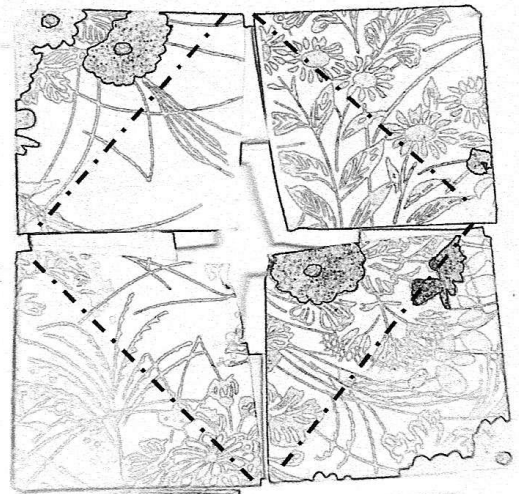
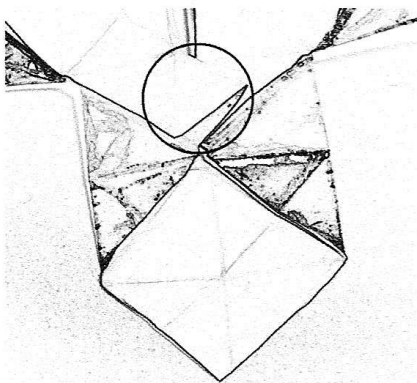


You will do this on all 4 corners.



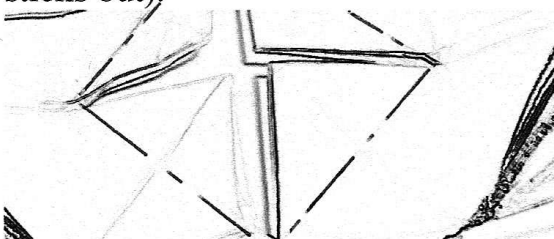
Repeat on all four corners.

Lift up the inner square and collapse all 4 corners, tucking it under the center flaps.

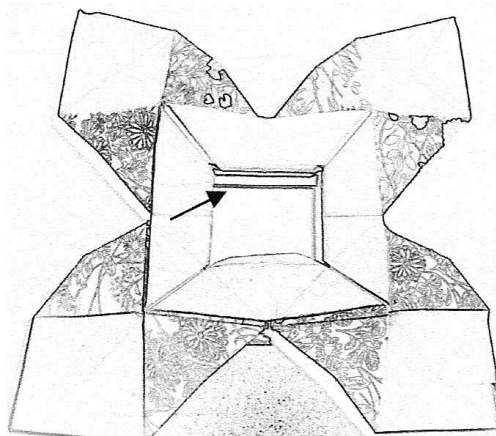
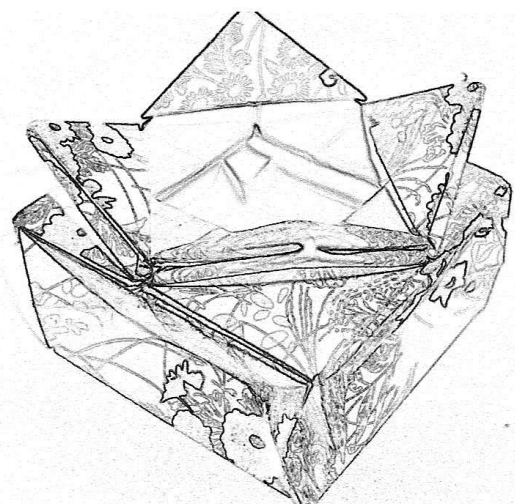


Tuck under right edge (or whichever corner sticks out)

Fold the tips under. To enlarge the box put your finger in the center and push out the sides.



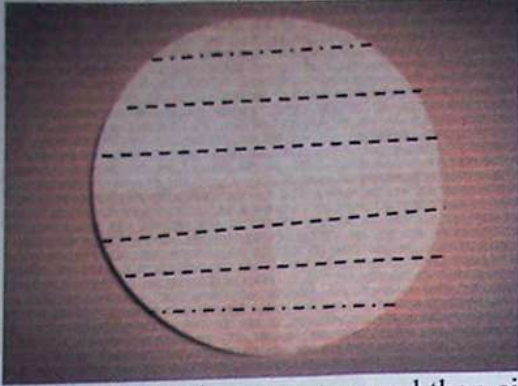
In the center fold tips under the first layer.



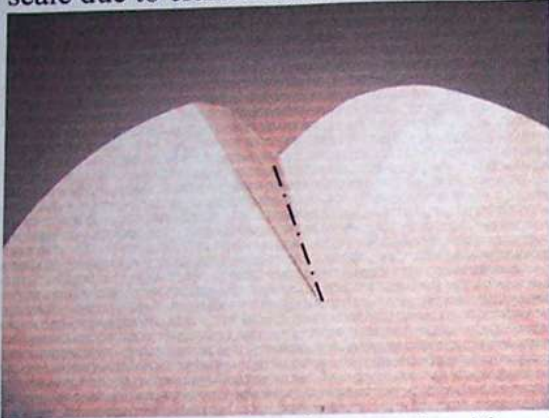
Partly lift up all four flaps.

To collapse push in the sides of the box.

Circle Container (Christine Edison c.c.)



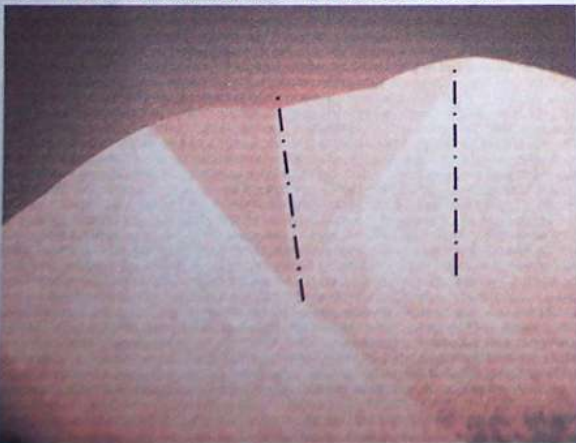
1. You fold halves quarters and then eighths, then rotate a quarter turn and do it again. Lines not to scale due to crankiness of Microsoft word.



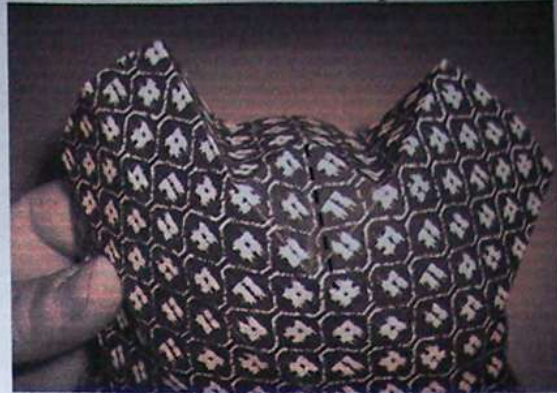
2. From the third 8ths intersection bisect the 90 degree angle. Do on each of the four "corners."



3. What it looks like. Flatten model.



4. Mountain fold as indicated. The crease in-between is the fold from step three.



5. Reverse the pre-existing crease on all four corners. Fold the flaps down and over.



6. How corner looks. Do on all four sides.



7. What it looks like. With stiff paper and folded over under this can hold by itself.





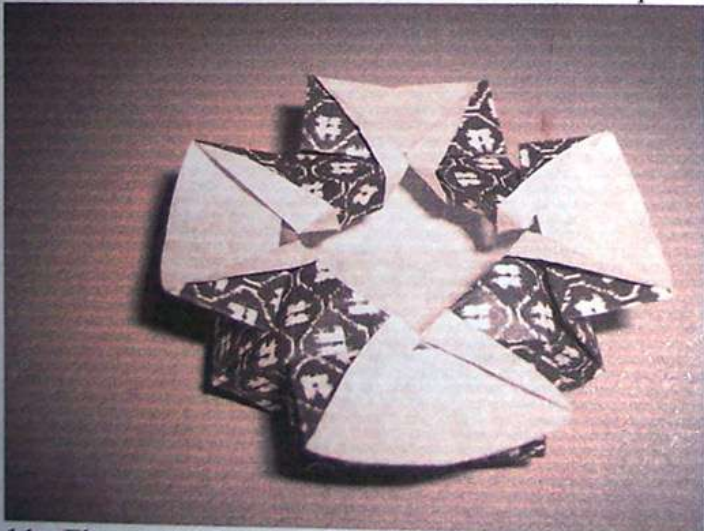
8. Fold back on pre-existing crease. The edges will curl. Crease where noted on all sides.



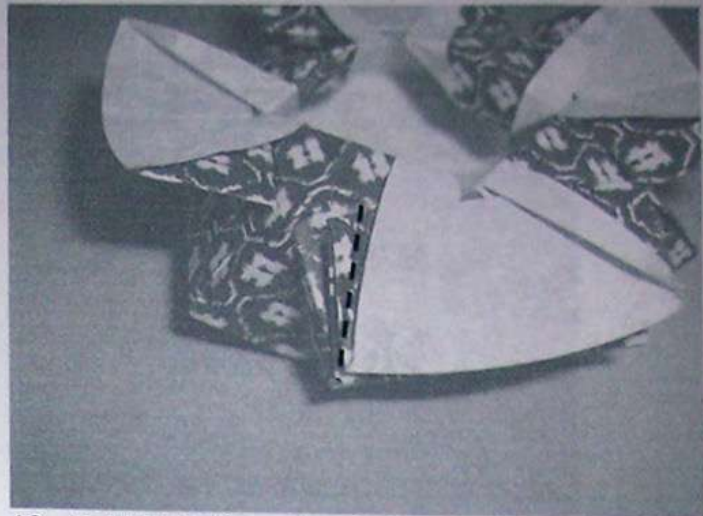
9. What it look likes when creased. If done well they lie even and don't overlap. Do on remaining three sides.



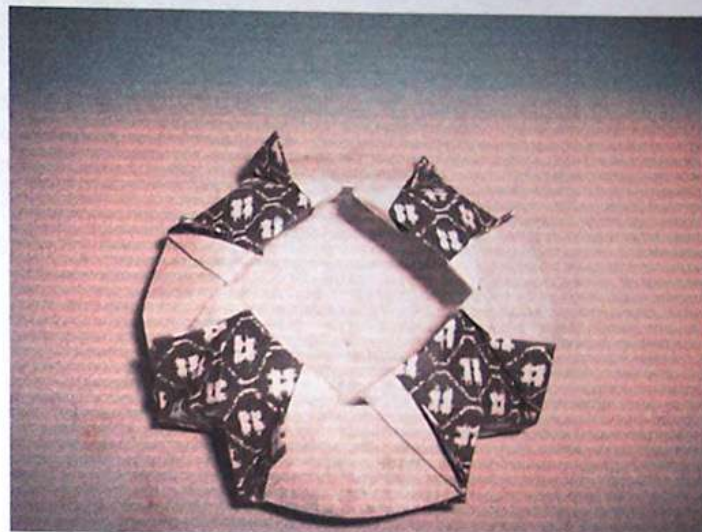
10. Where indicated fold under on all four flaps.



11. Flaps all folded under.

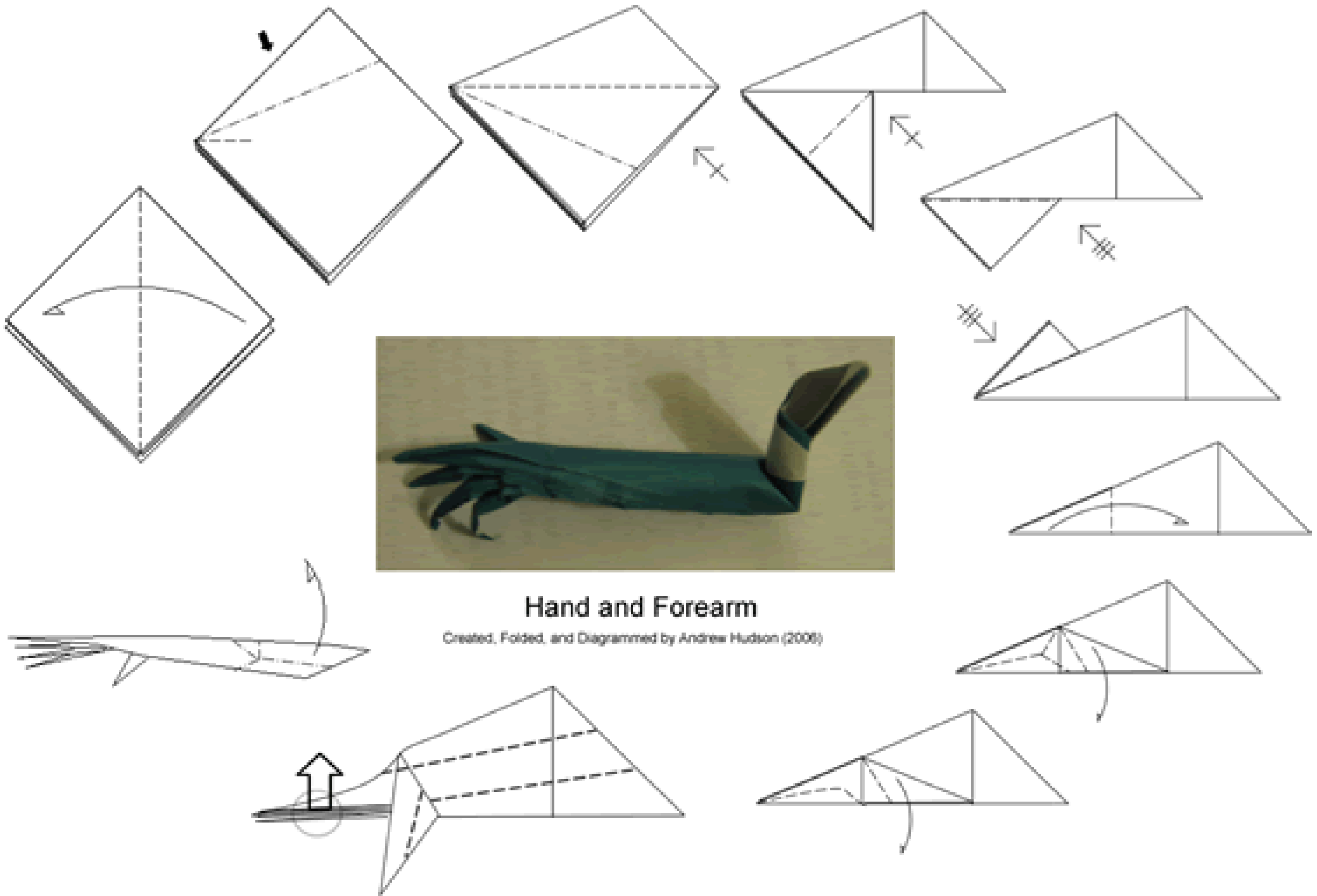


12. Fold little flaps (hard to see) over white. Repeat with remaining 7 flaps.



Finished container with two sided paper. With one color below.



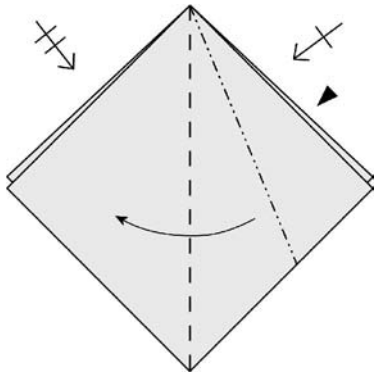


## Hand and Forearm

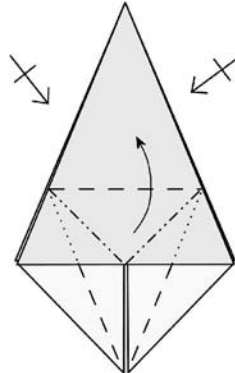
Created, Folded, and Diagrammed by Andrew Hudson (2006)

# Diamond Module (Interlocking Folding System)

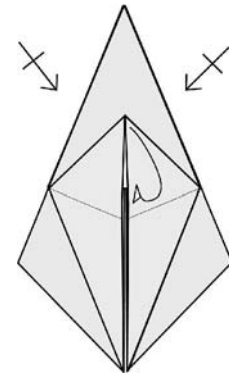
Designed 2005 and diagrammed 2005 by Anna L. Taylor



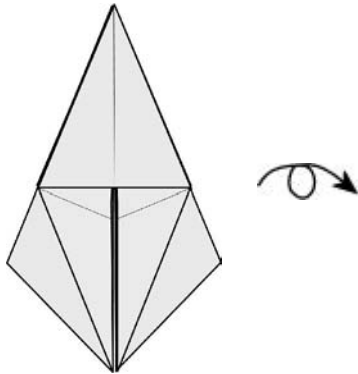
1. Start with preliminary base, color on outside. Squash flap. Repeat three more times.



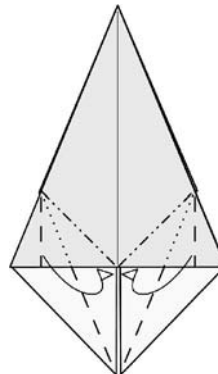
2. Petal fold. Repeat two times. Do not petal fold one flap.



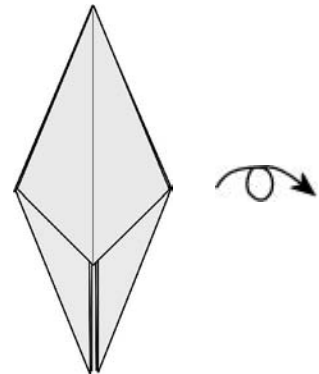
3. Put the petal on the inside. Repeat on the other two petal folds.



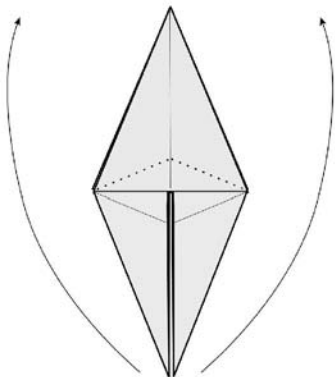
4. Result. Turn to side that does not have petal fold. Arrange so that there are an equal number of flaps on each side.



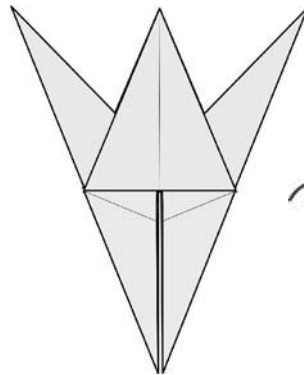
5. Petal fold but leave the point down this time.



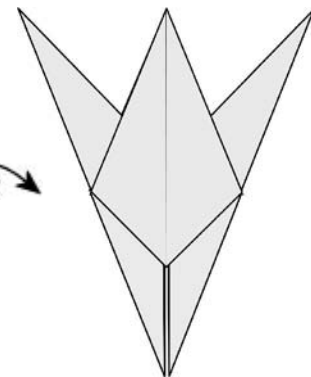
6. Result. Turn over.



7. Reverse fold the top lower flap on each side as high as possible along hidden fold lines while aligning edges. (See next diagram.)



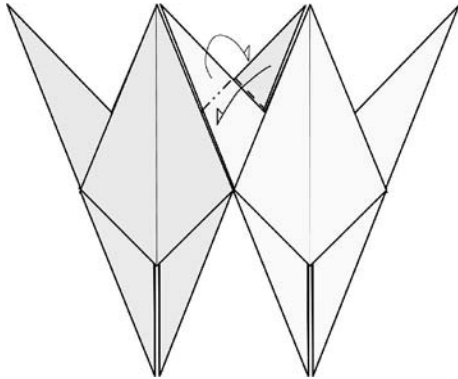
8. Back of Diamond Module.



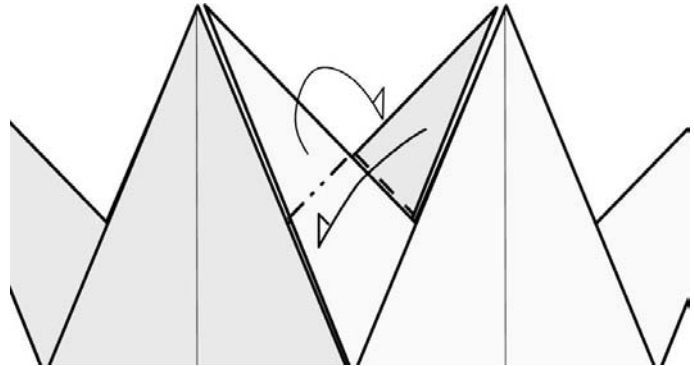
9. Front of Diamond Module.

## Horizontal and Vertical Connections

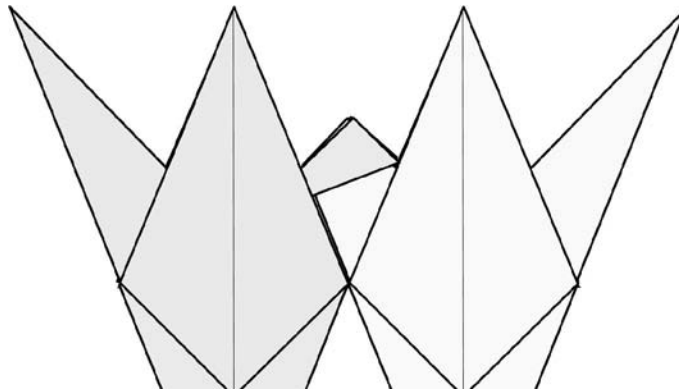
Designed 2005 and diagrammed 2005 by Anna L. Taylor



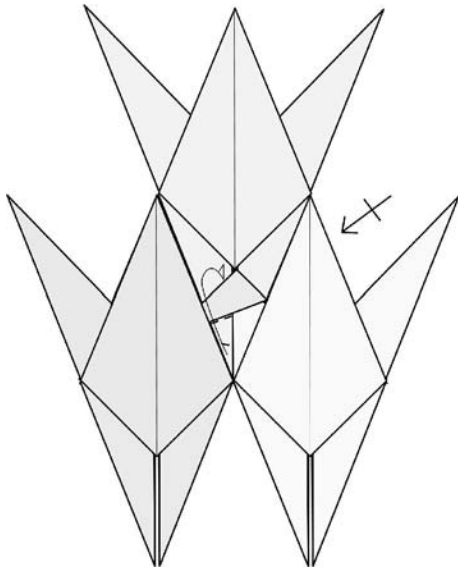
1. Place two modules so that the one overlaps the other with a snug fit at the top. Wet folding the paper will result in a stronger connection. Dampening the paper along the fold lines is sufficient.



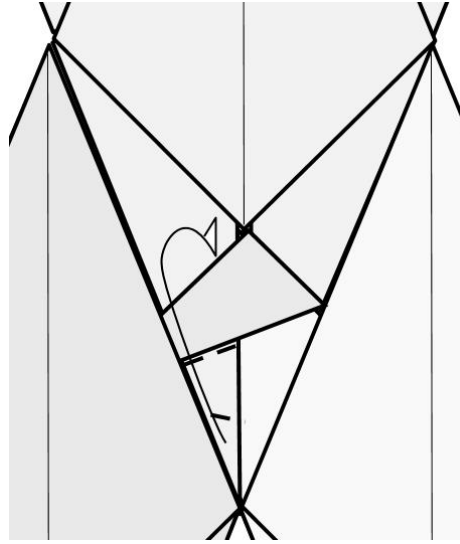
2. While keeping the modules so that the side flaps fit along the sides of the central points, mountain fold the flap on the top module back over the flap on the back module into the pocket behind the flap on the front module. Valley fold the flap on the back module forward over the flap on the front module into the pocket immediately in front of the flap on the back module.



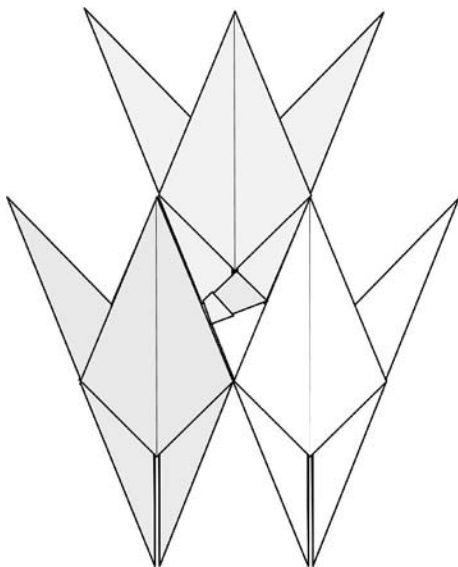
3. The horizontal connection is finished. The connection will allow movement but will be stable under tension. Continue adding modules until the desired width is achieved. It is possible to alternate whether the right or left module is on top. It is also possible to incorporate paper, string, or netting into the connection. This feature will be used for vertical connection.



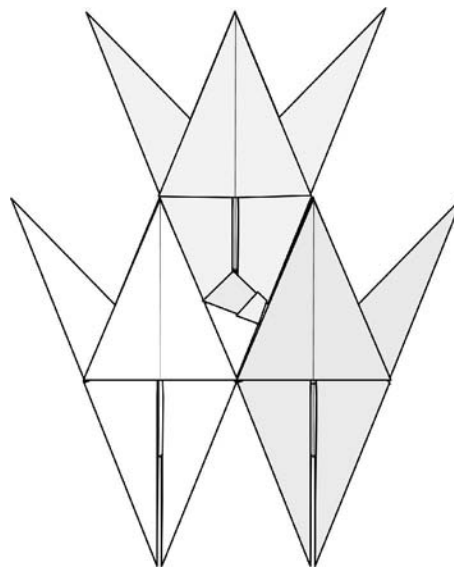
4. Slide module in from above so that the lower flaps go between the overlapping flaps in the horizontal connection. One flap will be in front of the main overlap and behind the front tab; the other will be behind the main overlap and in front of the back tab.



5. While keeping the modules so that the side flaps fit along the central points, valley fold the flap from the top module up and back over the flap on the lower module into the space behind the flap on the lower module. Repeat behind. Wet folding the paper will result in a stronger connection. Dampening the paper along the fold lines is sufficient.



6. Front of vertical connection folded around in horizontal connection.



7. Back of vertical connection folded around in horizontal connection.

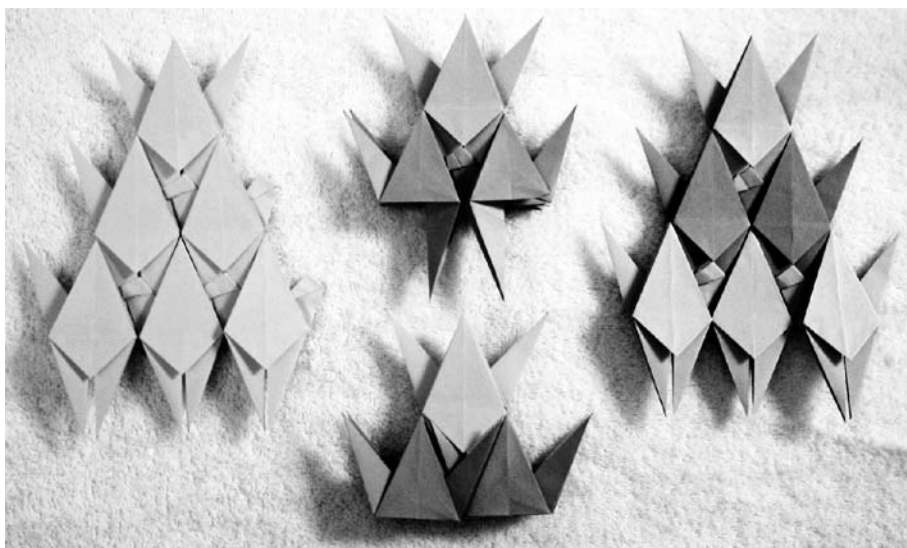
## Hand Puppet made with Diamond Modules

Designed and photographed August 2005 by Anna L. Taylor



1. This hand puppet is made from 59 Diamond modules folded from 5½ inch square paper. The puppet has a head about 9 inches long and the puppet is 12 inches tall. The number of modules needed will vary based on the size paper used and the size of puppet desired.

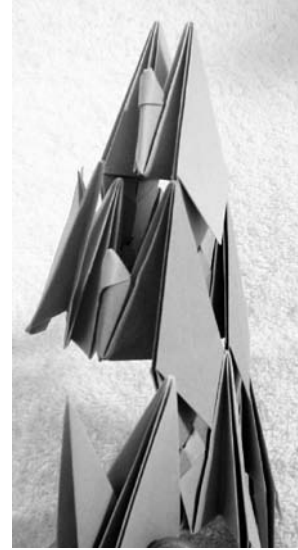
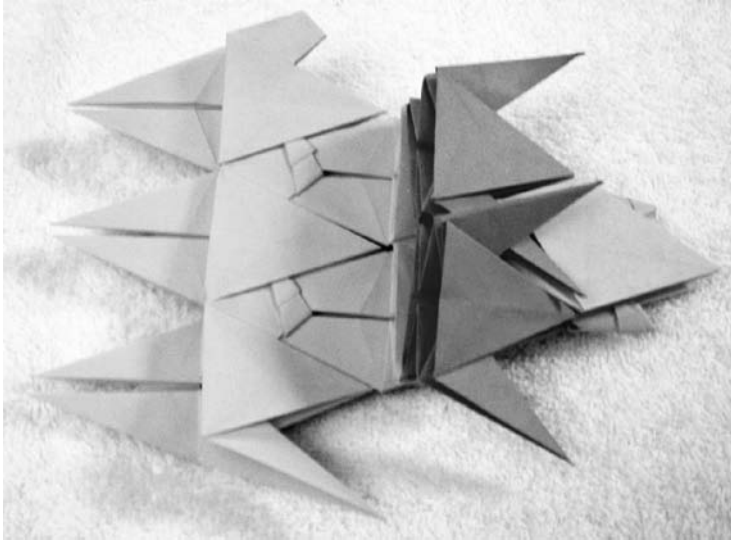
2. Back of the hand puppet.



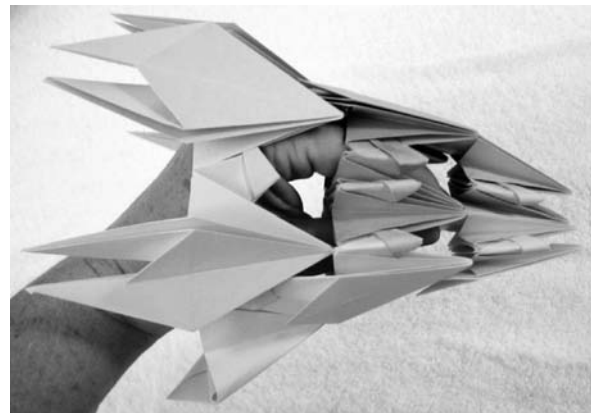
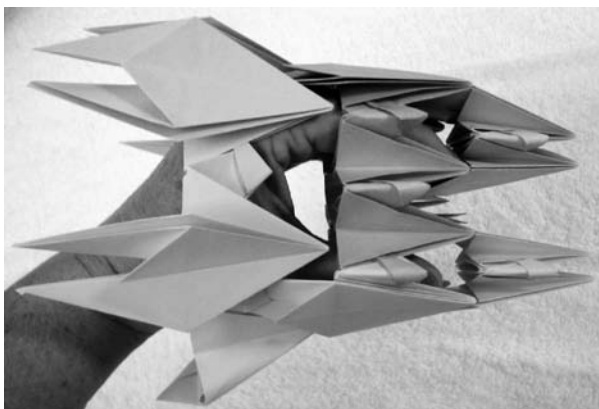
3. The photo above shows, from left to right, the module groupings needed for the lower jaw, inside of the mouth (top and bottom), and top of the head. The top and bottom of the inside of the mouth each use a pair of Triangle modules. A Triangle module has both the front and back folded the same way as the back of the Diamond module. Both the top and bottom of the inside of the mouth will look like the one on the bottom. The set of three modules on the top has the reverse folds undone to show that only one set of flaps is connected horizontally on the Triangle modules.

Diamond Module (Interlocking Folding System) and Hand Puppet

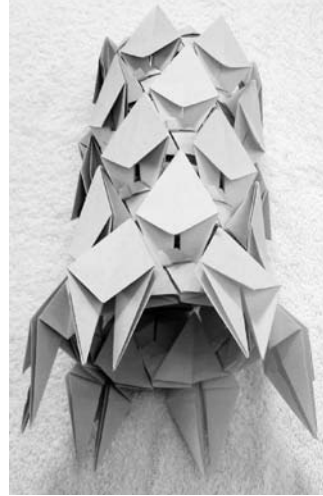
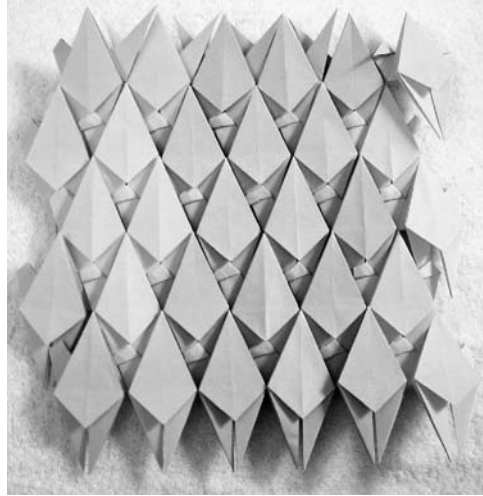
Designed by Anna L. Taylor – March 2005 : Diagrammed by Anna L. Taylor – August 2005  
Copyright © 2005



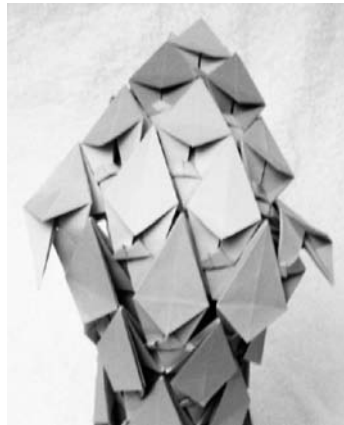
4. Place the back of one inside of mouth groups on the back of the lower jaw group. Connect the flaps at the sides using the horizontal connection where the flaps overlap. The back flaps of the modules need to separate slightly from the front to make the connection. Fold each horizontal connection in half vertically through the connection. Start with the two modules at the end as shown in the photo above on the left. The photo on the right shows the modules after all four connections have been made. Repeat with the top of the head and the other inside of the mouth.
5. Place the two completed groupings together with the Triangle modules together. Connect the flaps at the corners of the mouth together using the horizontal connection. Fold these two horizontal connections in half vertically. This completes the hinge at the back of the mouth. The four unconnected flaps remain on the inside of the mouth.



6. Connect the modules at the back of the head to the modules at the back of the lower jaw using the horizontal connection. Do not crease these connections vertically. The result should fit the hand of the person who is going to use the puppet.



7. Connect modules horizontally and vertically for the body to form a cylinder. The modules can be connected first in a rectangle but it can be difficult to connect the inside folds for the vertical connections. It may be easier to first connect two or three rows in a rectangle, then connect the ends to make a cylinder, and finally add rows to the cylinder. The finished hand puppet in the photo in step 1 was made with three rows of six modules and two rows of seven modules for the body so that the base would fit an adult forearm.

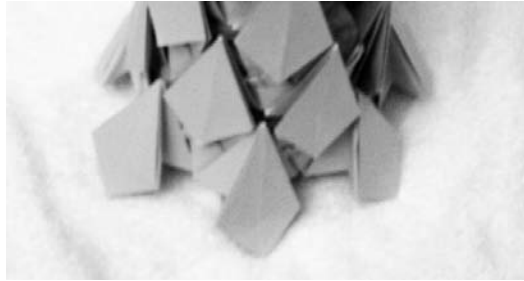


8. Connect four modules together horizontally. Using vertical connections, connect this group to the back of the head. Connect three modules together horizontally and connect this group to the group at the back of the head using vertical connections. Using vertical connections, connect the group of three to the top of the body. This forms the back of the neck of the hand puppet. The front of the neck is left open to allow easier movement of the head.





9. To help hide the hand inside the puppet, use a vertical connection to add a module to the horizontal connections behind the back of the mouth on each side of the head. This module can either be left pointing forward or folded inside the mouth as shown in the photo above. The flaps normally used for horizontal connections can be folded down.

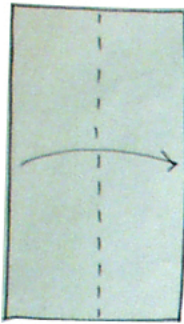


10. Fold the unused lower flaps at the bottom of the body and the back of the jaw to the inside of the modules for a finished edge.
11. The hand puppet can be used with the arm inside the body. If a longer body, such as for a snake or a dragon is needed, then it is possible to put the hand in the head of the puppet through the open neck. If so, then the extra modules added in step 8 could be omitted and the head can be connected directly to the body. Both the vertical and horizontal connections will allow movement. This is especially true for the vertical connections. Depending on the paper used and the use of the puppet, it may be helpful to glue some of the connections.

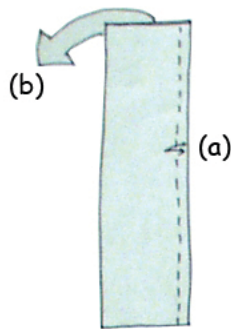
Use the modules for other items as well. How about a suit of armor from foil giftwrap? Use your imagination.

# SHIRT with CONTRASTING TRIM - Designed & Diagrammed by Mary Ellen Palmeri

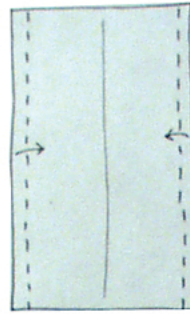
Use a 2:1 rectangle (half a square)



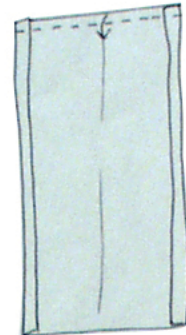
1. WHITE SIDE UP  
(will be the trim color  
on the shirt)



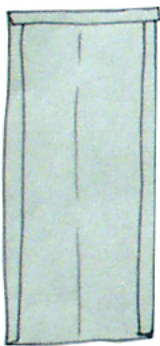
2. (a) Valley fold  
a small edge thru  
both layers; crease  
well & unfold.  
(b) Unfold the back  
to the front



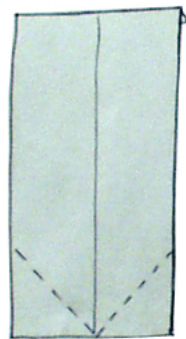
3. COLORED SIDE UP  
(will be color of shirt  
body) Valley fold edges  
on the creases made  
in step two



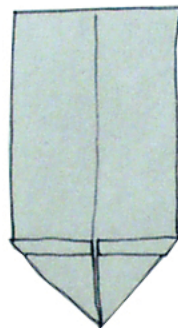
4. Valley fold a small  
edge to have collar  
same color as the trim  
(See "VARIATION" to  
have collar same as shirt  
body color)



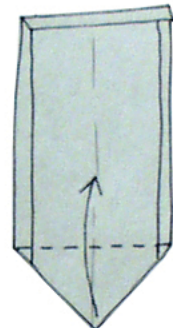
5 TURN MODEL  
OVER....



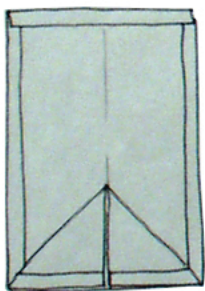
6. Fold corners to  
center crease



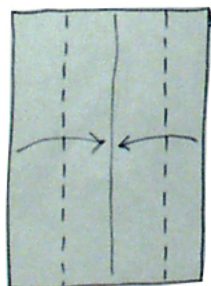
7. TURN MODEL  
OVER...



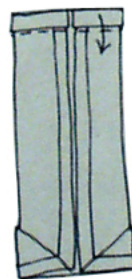
8. Fold up evenly



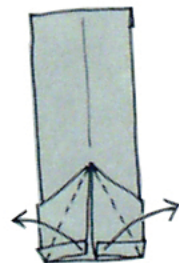
9. TURN OVER...



10. Cupboard-door  
fold (sides to  
center crease)



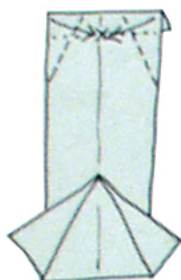
11. Valley fold  
top edge down,  
then TURN OVER...



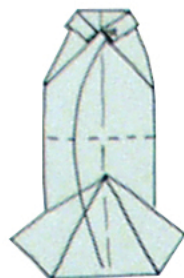
12. Fold flaps out as  
fare as they will go,  
at angle shown...

# SHIRT with CONTRASTING TRIM - Designed & Diagrammed by Mary Ellen Palmeri

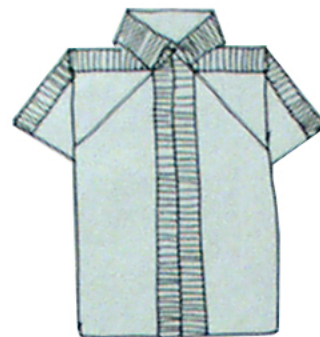
Pg 2 of 2



13. Note angles of valley folds: outside corners angle in & down to meet on center crease (see next step for results)



14. Bring lower section up and slide it under the collar flaps, then crease firmly to hold in place



15. Completed Shirt with Contrasting Trim & Collar

VARIATION - To have collar same color as the shirt body:

In step 4 above, do not make valley fold at top of model; just turn model over and go to step #6. Continue with steps 6 - 10, then substitute the following step 11' for first step 11. Finish with the same steps 12 - 15 to complete.

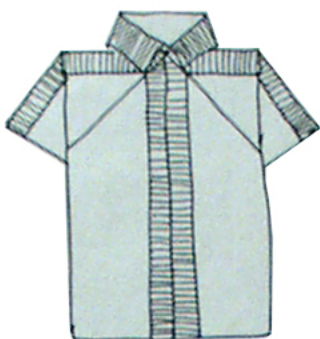


11'. Valley fold the top down, two times...



15'. Completed Shirt - contrasting trim but with collar same color as body of shirt

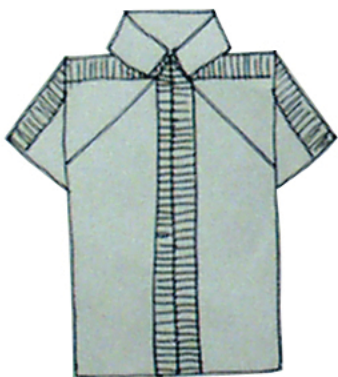
SHIRT with CONTRASTING TRIM - Designed & Diagrammed by Mary Ellen Palmeri



15. Completed Shirt with Contrasting Trim & Collar



VARIATION - To have collar same color as the shirt body:



15'. Completed Shirt - contrasting trim but with collar same color as body of shirt



# Dendrobium orchid

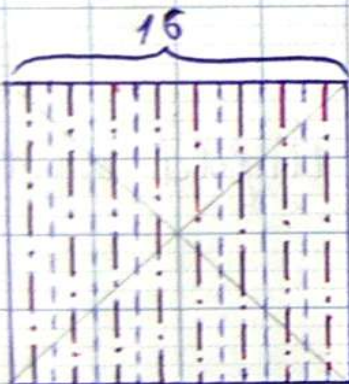
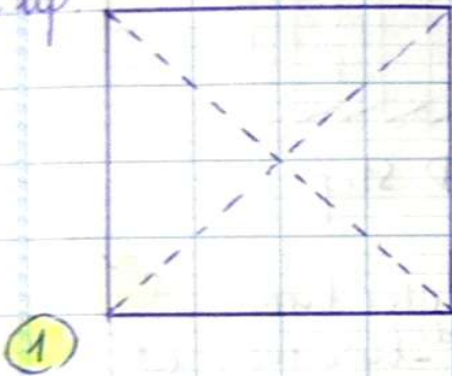
Tran Trung Hieu

--- : mountain fold  
- - - : valley fold  
↷ : fold & unfold

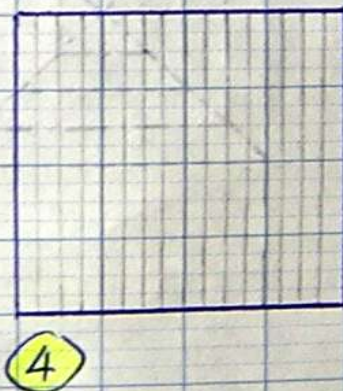
Design : x. 10. 2006

Diagram : 10. 12. 2006

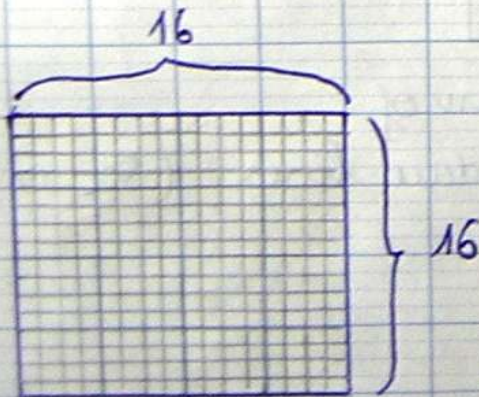
Colored side up



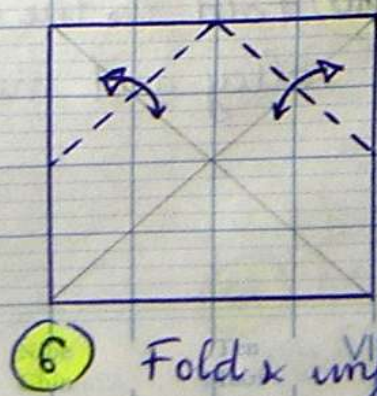
Fold & unfold



Repeat step 2-3



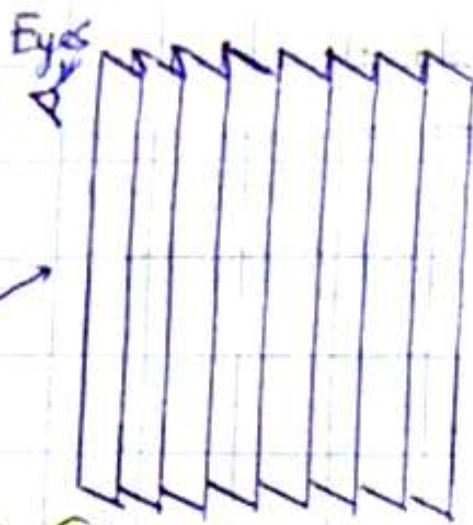
After doing step 4, the paper likes this.



Fold & unfold



7) Fold mountain & valley.



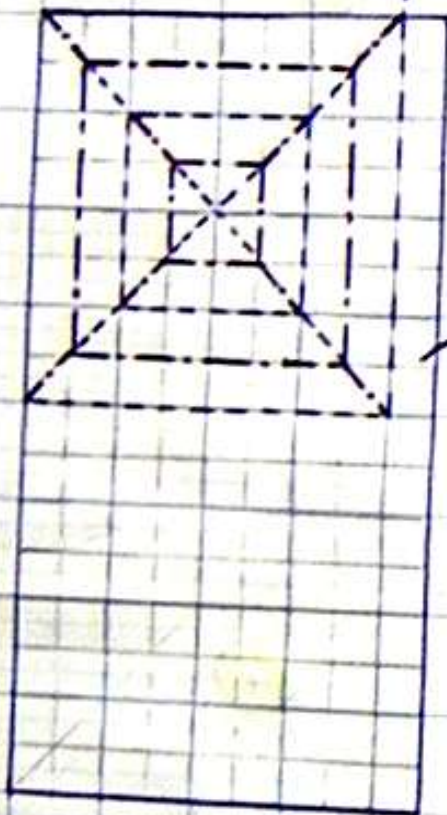
8) 3-D Step



Unfold a half.

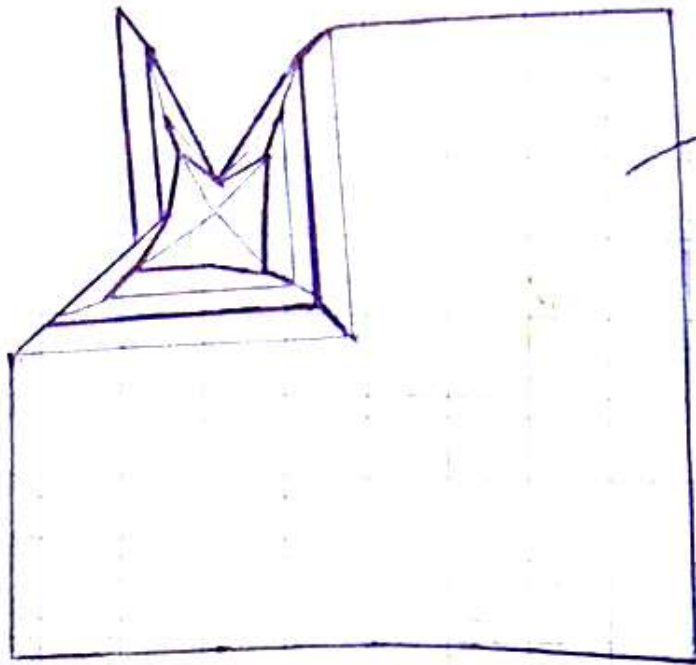
9)

The center line (8<sup>th</sup> line from left)



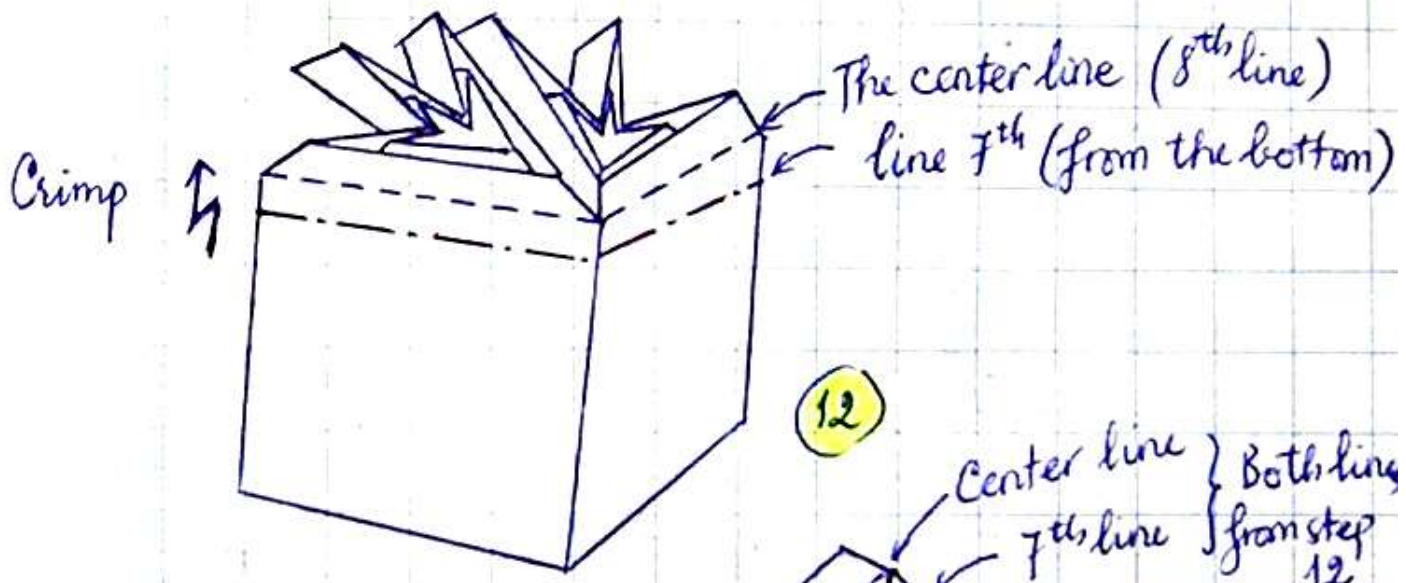
Unfold another half paper.

10) Fold as the show of valley and mountain lines (See carefully).



Repeat Step 10

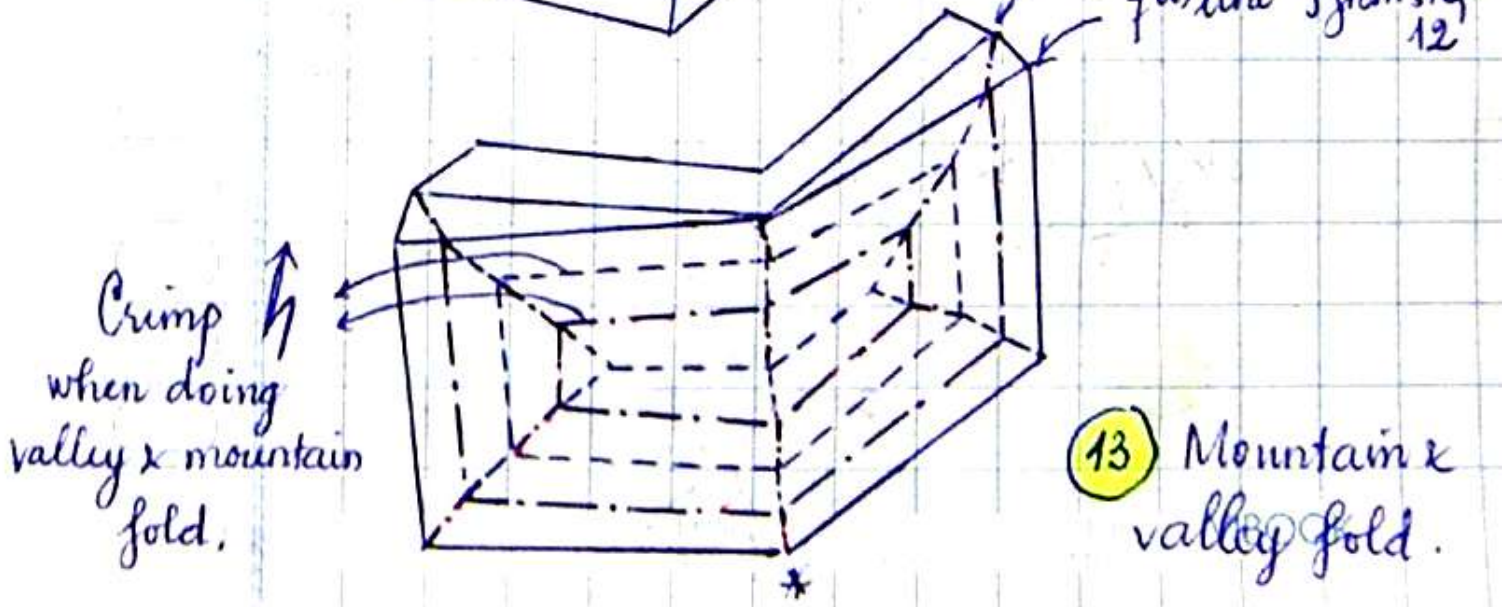
11



Crimp

The center line (8th line)  
line 7th (from the bottom)

12

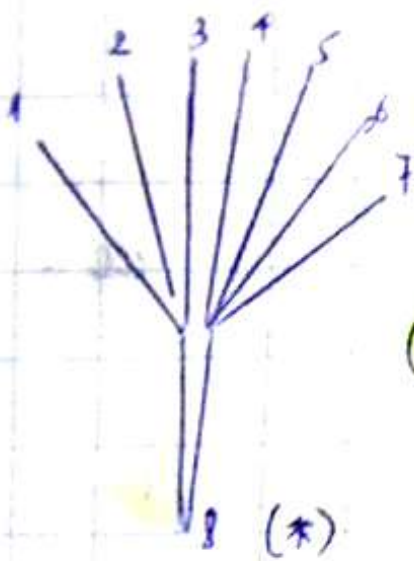


Crimp when doing valley & mountain fold.

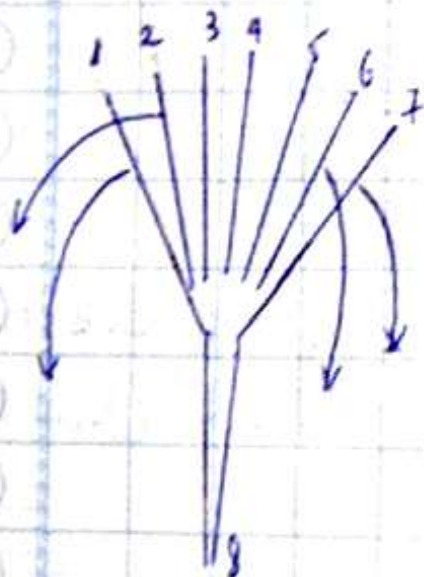
Center line } Both lines  
7th line } from step 12

13 Mountain & valley fold.

\*



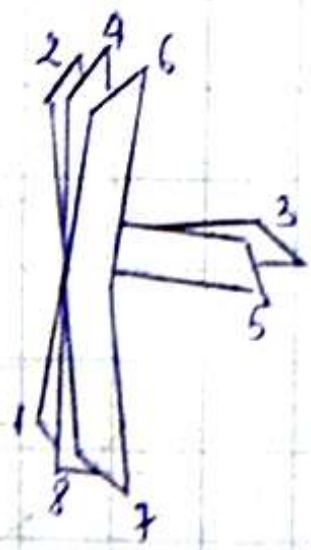
(14) After doing step 13, the base of the orchid completed like this.



Fold down (15)

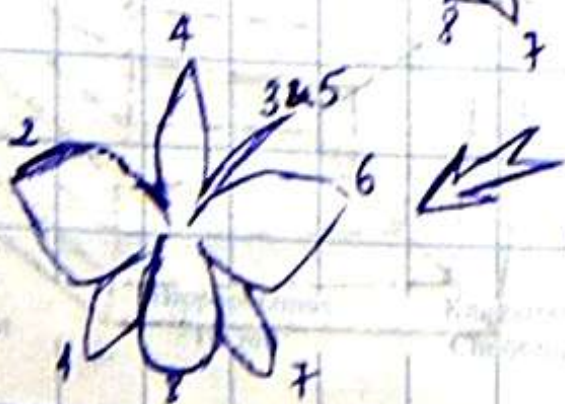


Pull 45°  
(Repeat on 3)



(17) Look at the final step of the model to see the sections.

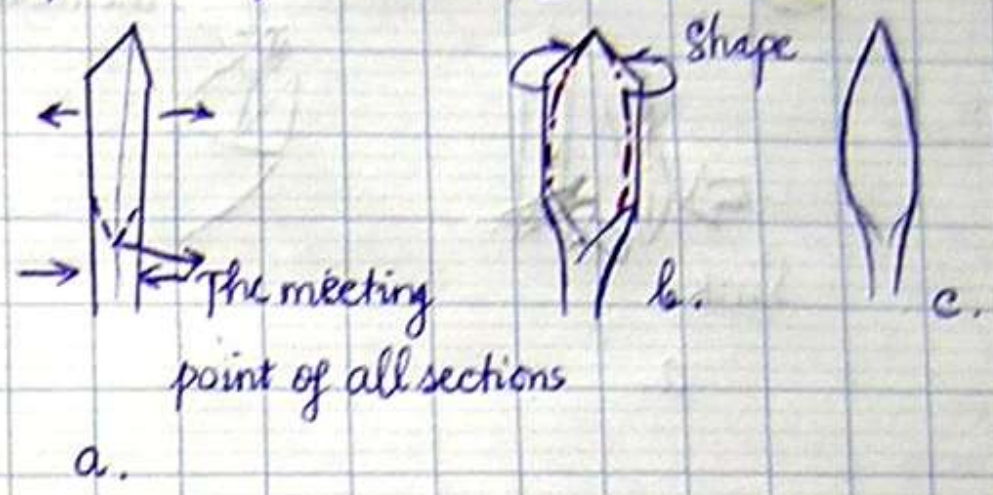
(16)





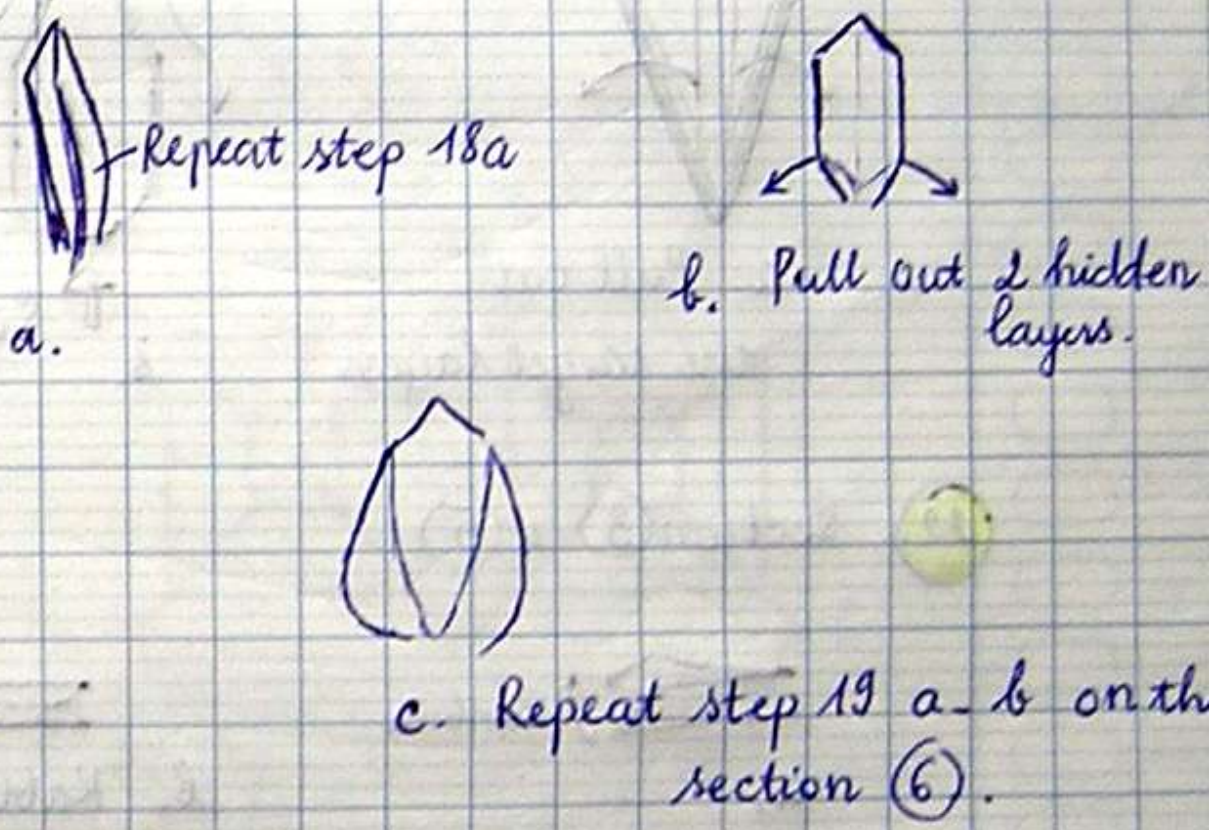
18

This step view from the (4) section.



19

This step view from the (2) section.



20

Section (1) x (7)



a.



b.



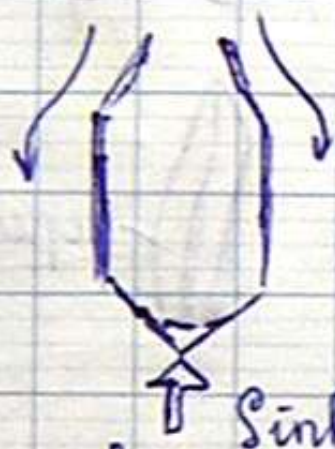
c.

21

Section (8)



a. Pull out the target layers

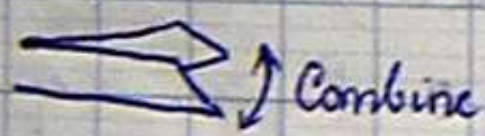


b.

Shape this section.

22

Section (3) x (5)



a.

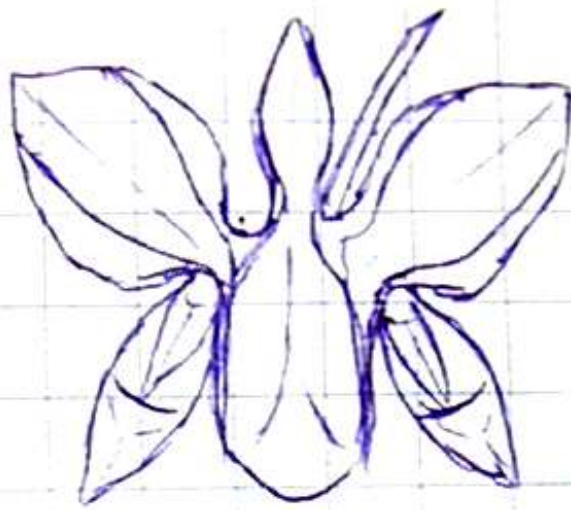


b. Rabbit car.



c.

23

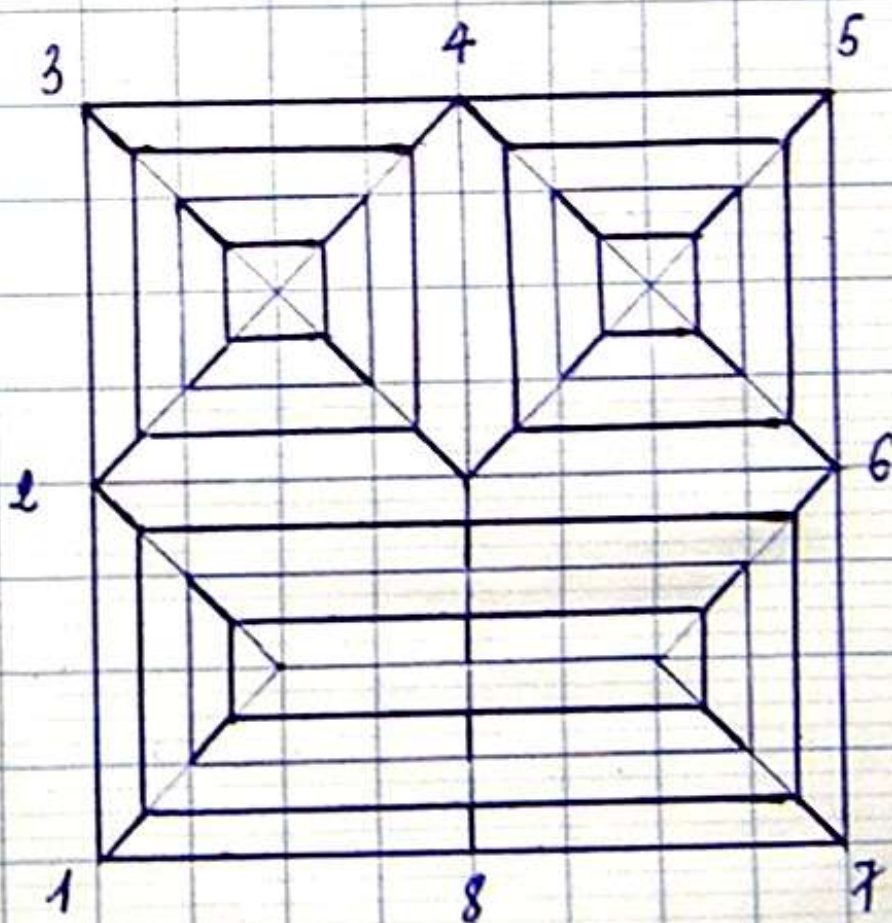


Dendrobium orchid  
complete!

If you want to fold another orchids, you can use this base but different grids.

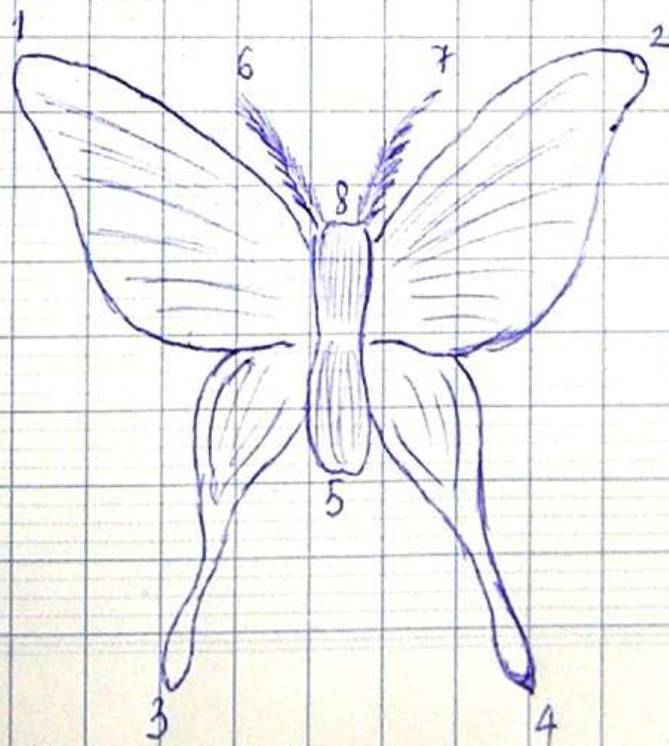
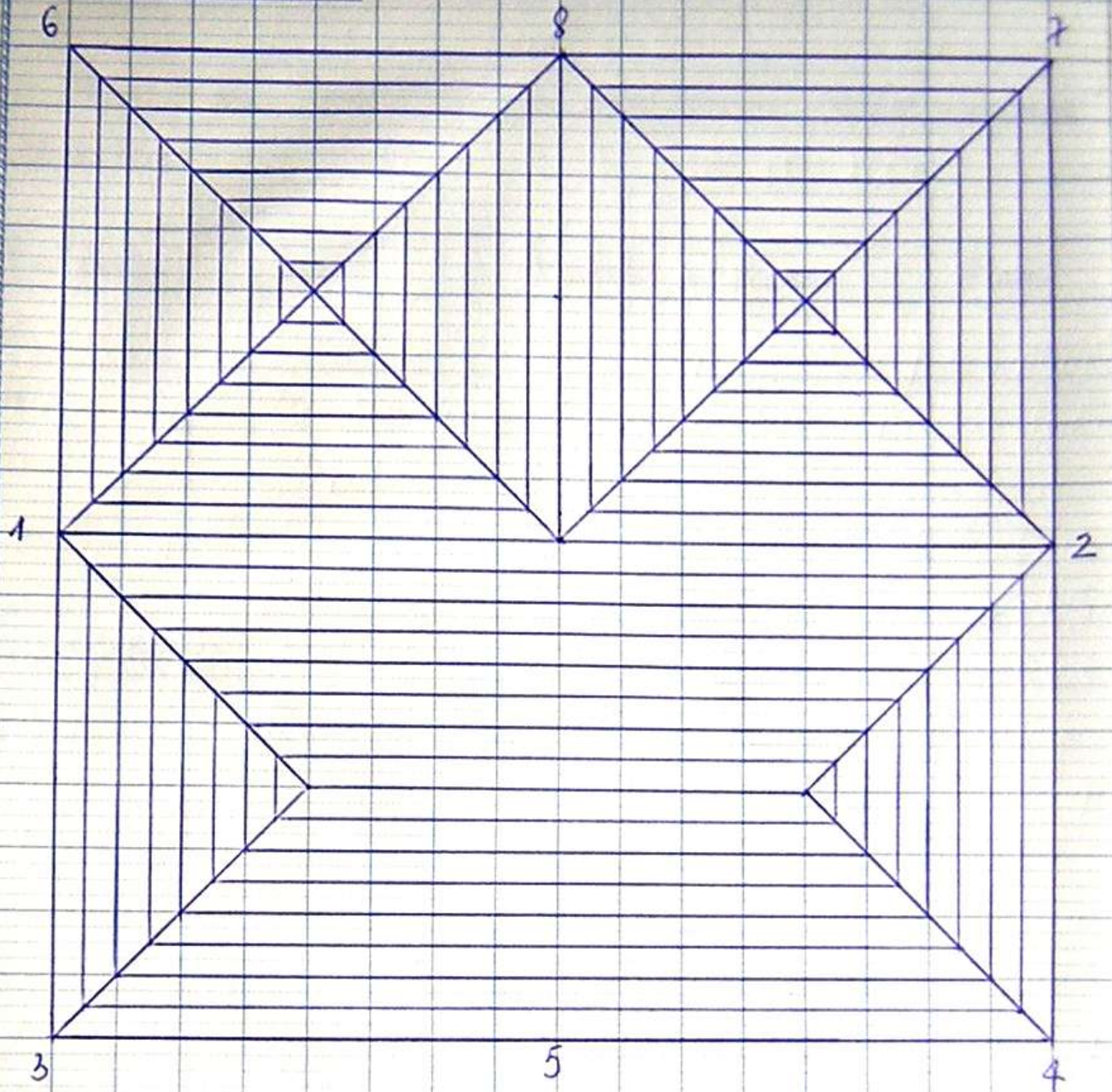
For example, the Cattleya orchid I used box pleating 32.

Here is the CP for the Dendrobium orchid.



Lunamoth CP :

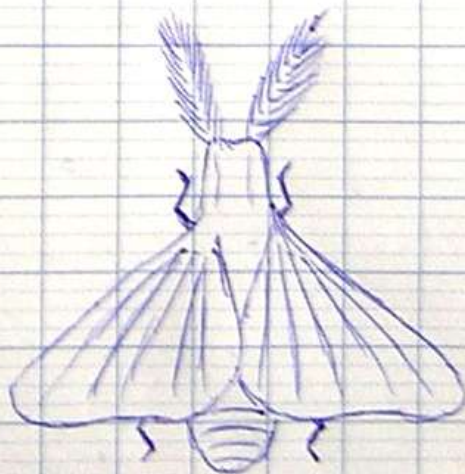
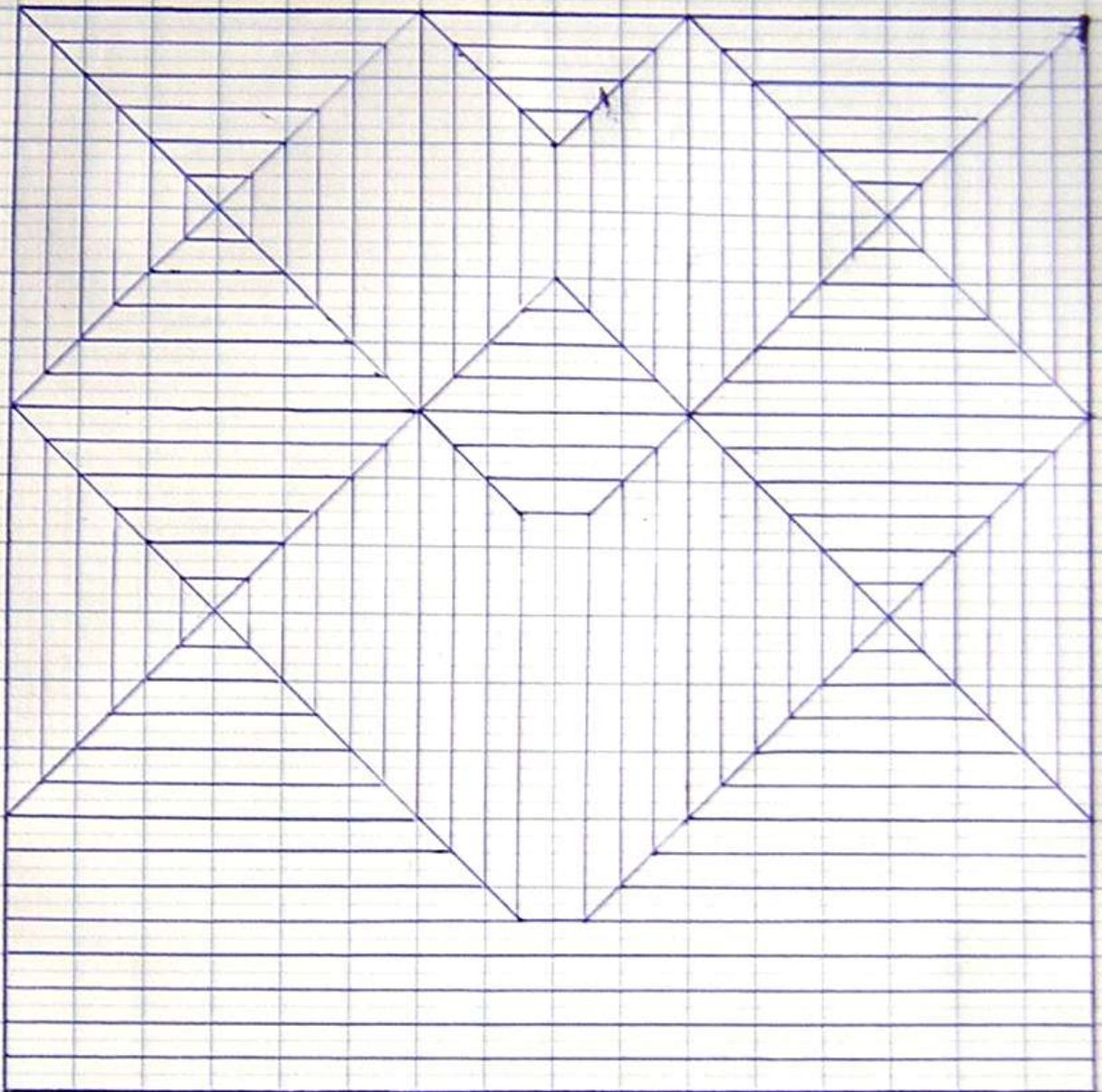
Tran Trung Hieu

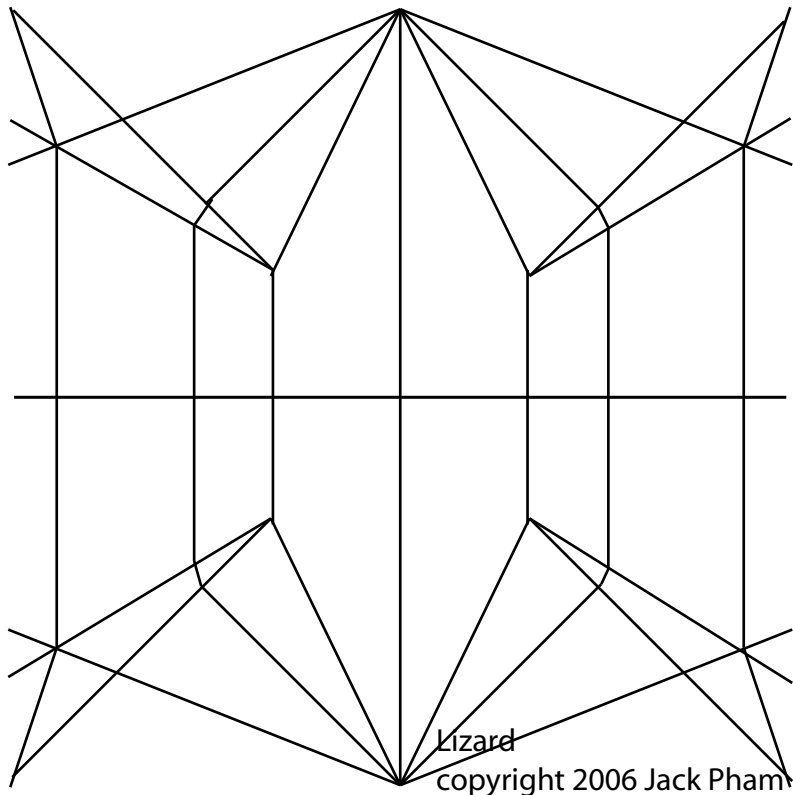


# Big Antennae Moth

Tran Trung Hieu

CP for the Big antennae Moth : (Box pleating 32)

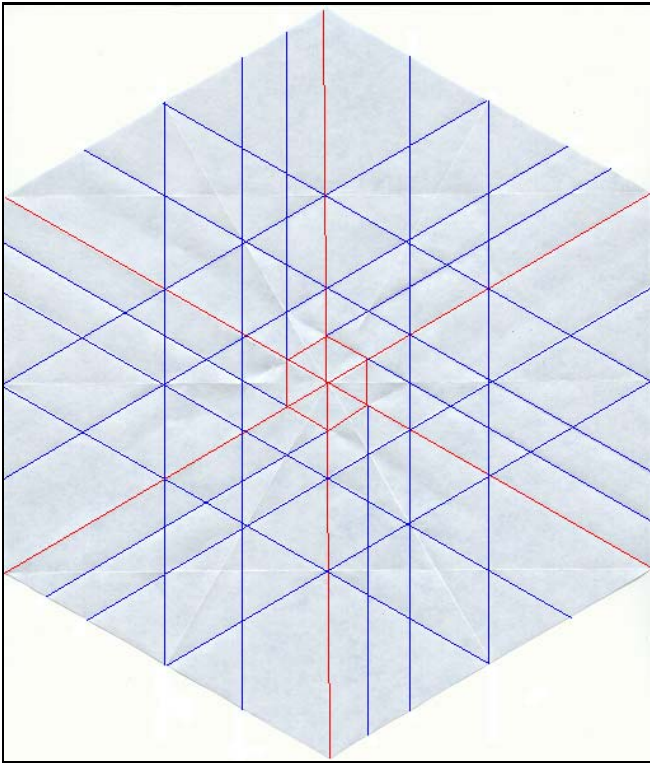




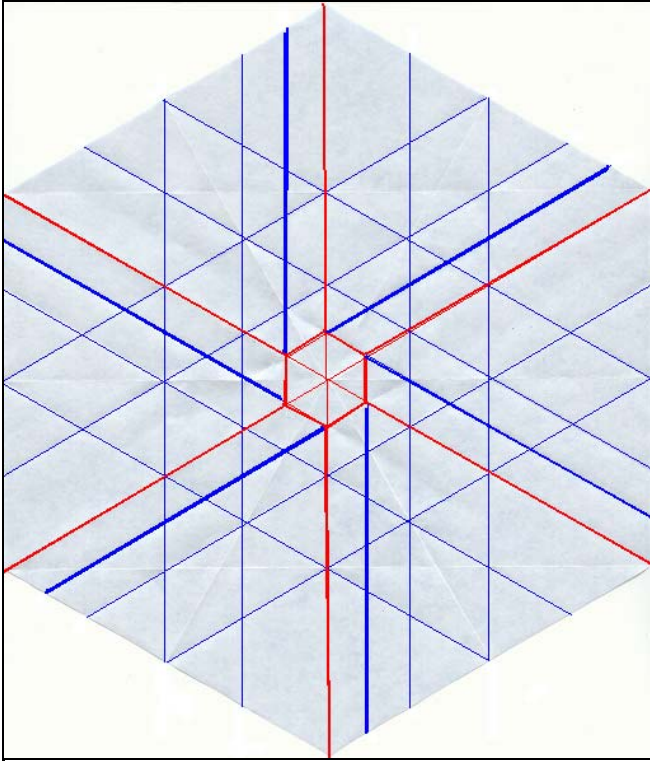
Lizard  
copyright 2006 Jack Pham

# SIXFOLD ROSE

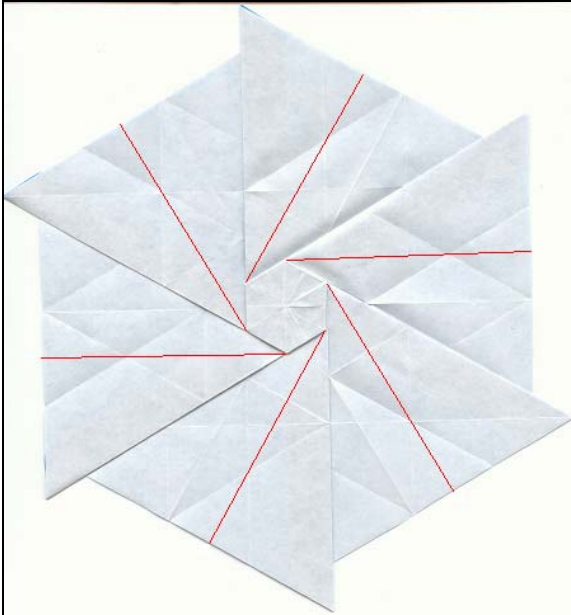
DIAGRAM AND DESIGN BY RDUDE



1. STARTING WITH A HEXAGON, MAKE THE FOLLOWING CREASES. BLUE LINES REPRESENT VALLEY FOLDS, RED LINES ARE MOUNTAIN FOLDS.



2. PERFORM AN ISO AREA FOLD USING THE BOLDED LINES.

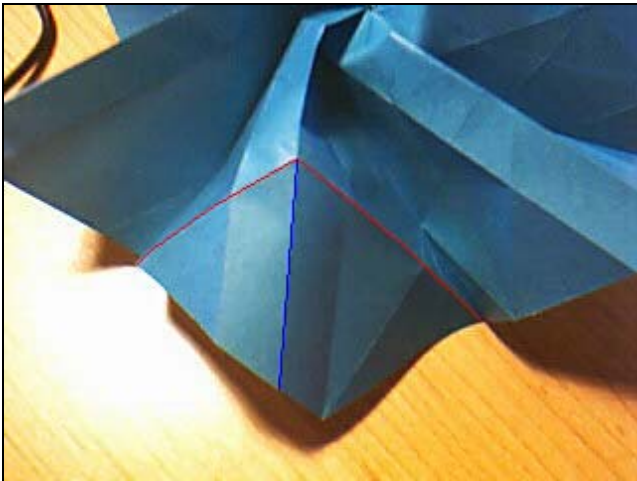


3. MAKE THE FOLLOWING MOUNTAIN FOLDS, THE MODEL WILL NOT REMAIN FLAT.

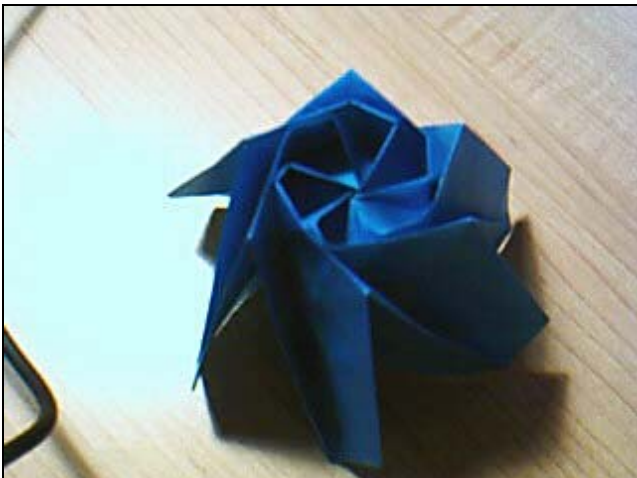




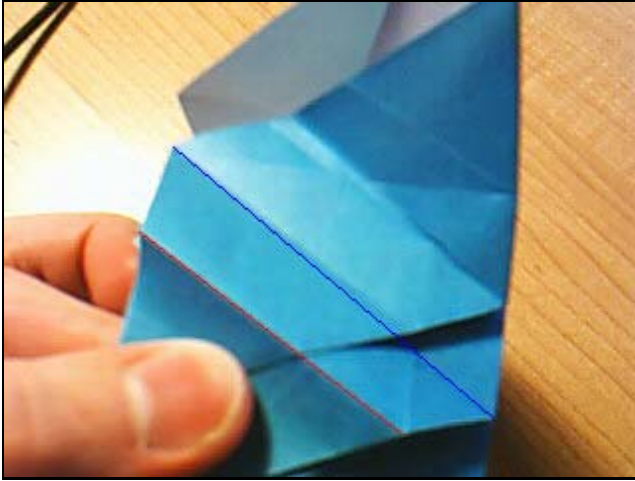
4. THIS IS THE RESULT OF STEP 3, AFTER THE MODEL HAS BEEN FLIPPED OVER.



5. OPEN OUT ONE OF THE SIX SIDES, AND MAKE THE FOLLOWING FOLDS; THE 2 ON THE LEFT ALREADY EXIST, BUT YOU HAVE TO MAKE THE RIGHTMOST MOUNTAIN FOLD FROM THE INTERSECTION OF THE FIRST 2 CREASES TO THE LOWER CORNER. REPEAT ON ALL SIDES.



6. THIS IS THE RESULT.



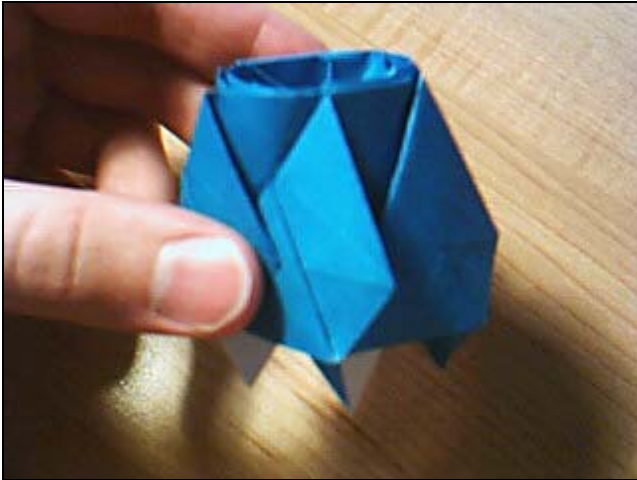
7. OPEN OUT ONE OF THE SIDES. THIS IS THE RESULT. MAKE THE MOUNTAIN AND VALLEY FOLDS; THE VALLEY FOLD LIES ALONG A PARTIALLY EXISTING CREASE. THE MOUNTAIN FOLD CREATES AN AREA THAT IS SYMMETRIC WITH THE ONE ON THE OPPOSING SIDE.



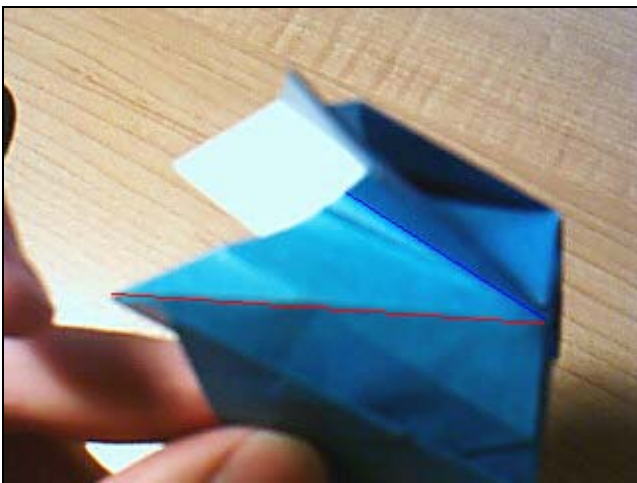
HERE IS ANOTHER VIEW OF THE FLAPS.



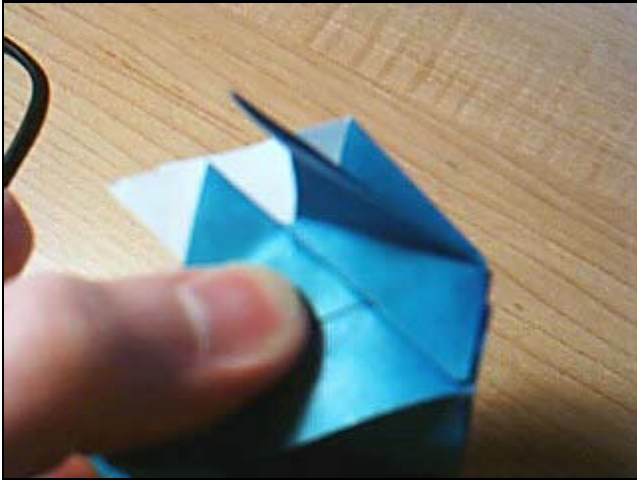
8. THIS IS THE RESULT. REPEAT ON ALL 6 SIDES.



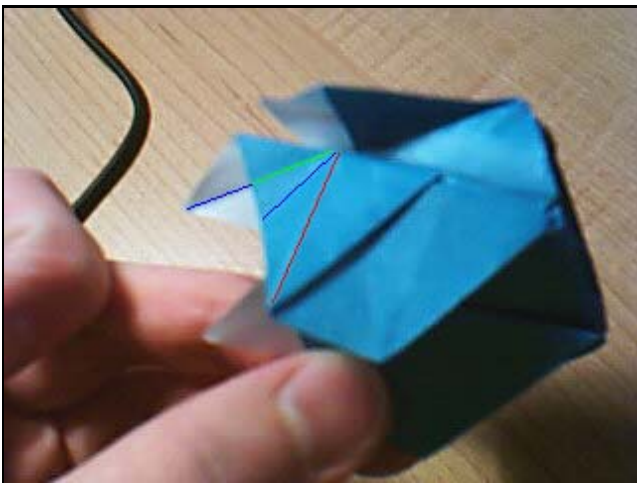
9. THIS IS THE RESULT.



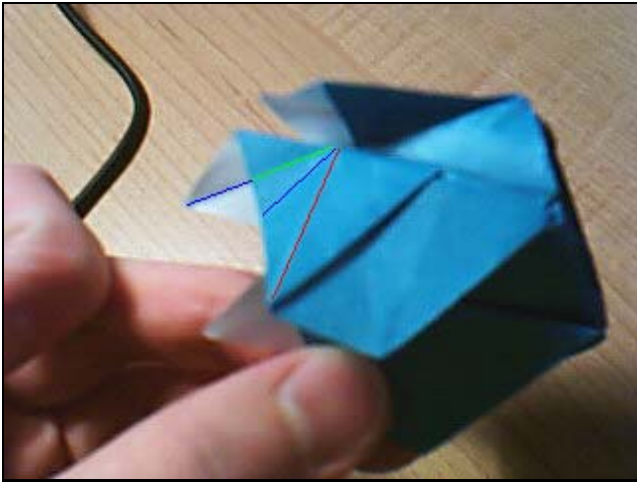
10. OPEN OUT ONE OF THE SIX FLAPS AND MAKE THE FOLLOWING CREASES. THE MOUNTAIN FOLD COMES FIRST, AND THE VALLEY FOLD TAKES CARE OF ITSELF.



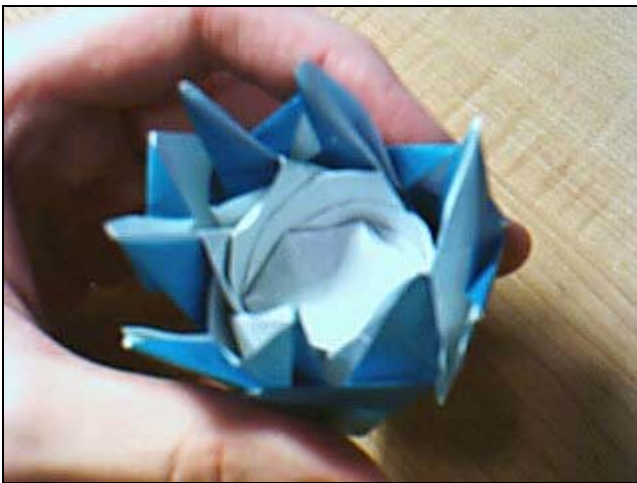
11. HERE IS AN OUTSIDE AND INSIDE VIEW OF THE RESULT OF THE LAST STEP. NOTICE HOW THE FLAP WE HAVE BEEN WORKING ON HAS BEEN NARROWED, AND BECOMES TEAL ON THE UNDERSIDE. REPEAT ON ALL 6 SIDES.



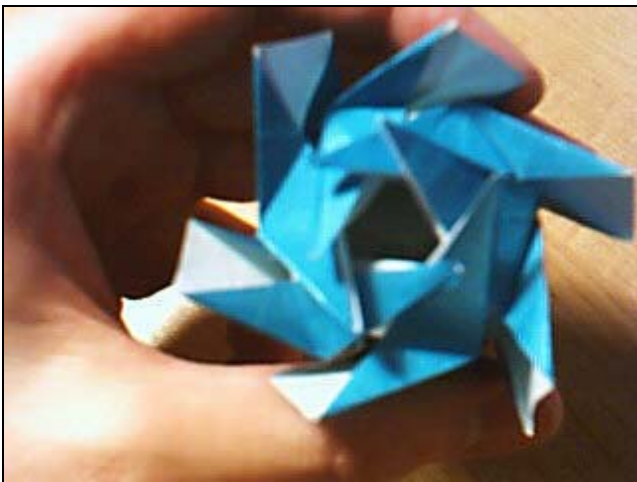
12. THIS NEXT FOLD IS SOMEWHAT OF A PETAL FOLD. THE GREEN LINE IS AN X - RAY LINE OF A VALLEY FOLD.



13. THIS IS THE RESULT. REPEAT ON ALL SIDES.



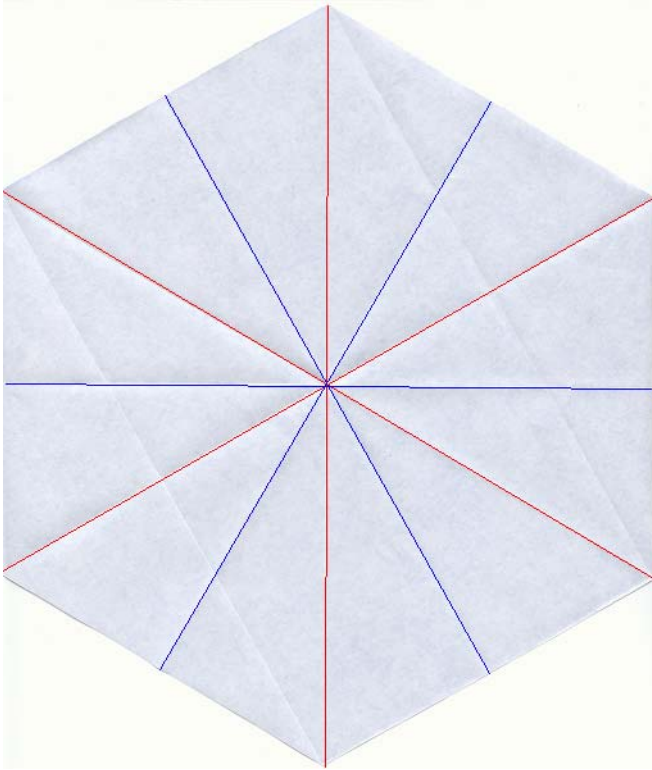
14. IT WILL LOOK LIKE THIS.



15. FOLD ALL THE FLAPS DOWN. SET THIS ASIDE FOR NOW.

### SIXFOLD CALYX

DIAGRAM AND DESIGN BY RDUDE



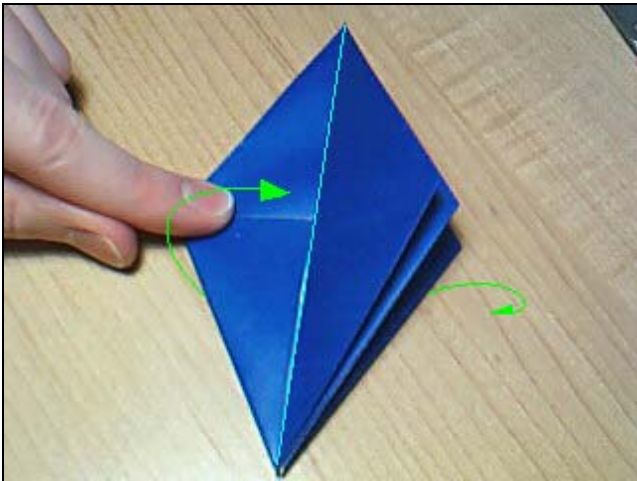
1. MAKE THE FOLLOWING CREASES. RED LINES REPRESENT MOUNTAIN FOLDS. BOTH DARK AND LIGHT (IN LATER STEPS) BLUE LINES STAND FOR VALLEY FOLDS. FOLD A 6 SIDED BIRD BASE.



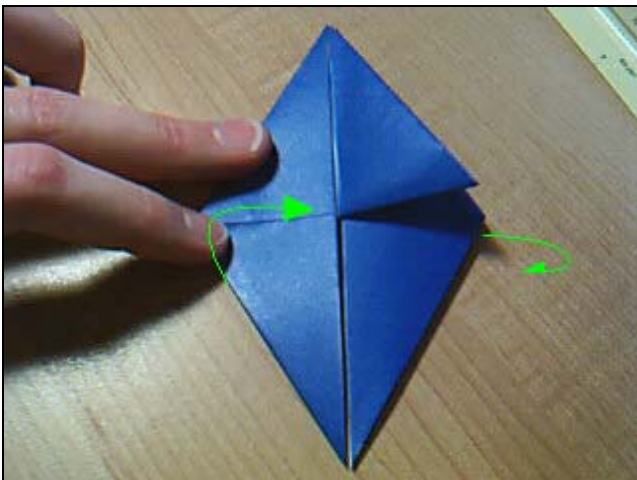
2. FOLD A CRANE BASE.



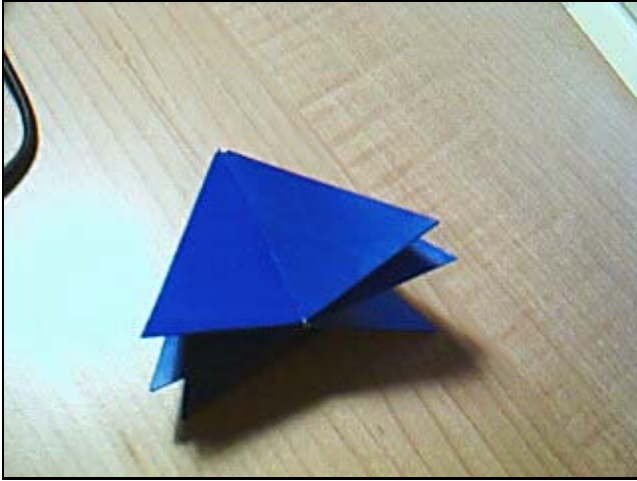
3. THIS IS THE RESULT. FOLD 2 FLAPS UPWARD, 1 IN FRONT AND ONE BEHIND.



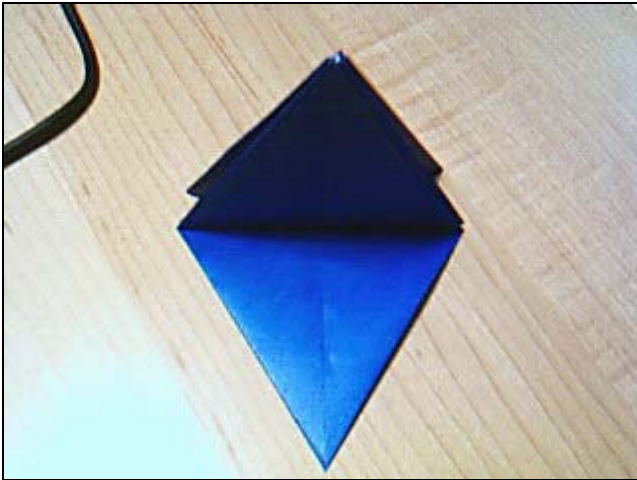
4. PERFORM A "MINOR MIRACLE" (FOLD ONE FLAP ON THE FRONT TO THE RIGHT, AND THE OPPOSITE FLAP BEHIND TO THE LEFT.) REPEAT STEP 3 ON THE NEWLY EXPOSED SET OF FLAPS.



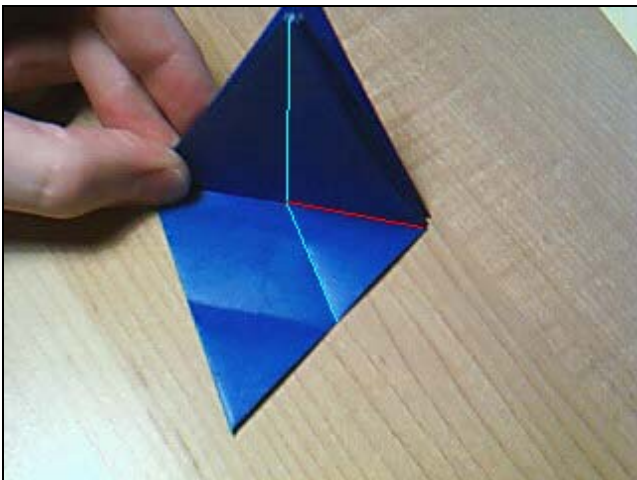
5. PERFORM ANOTHER MINOR MIRACLE. THEN REPEAT STEP 3 AGAIN ON THE LAST 2 FLAPS.



6. THIS IS THE RESULT.

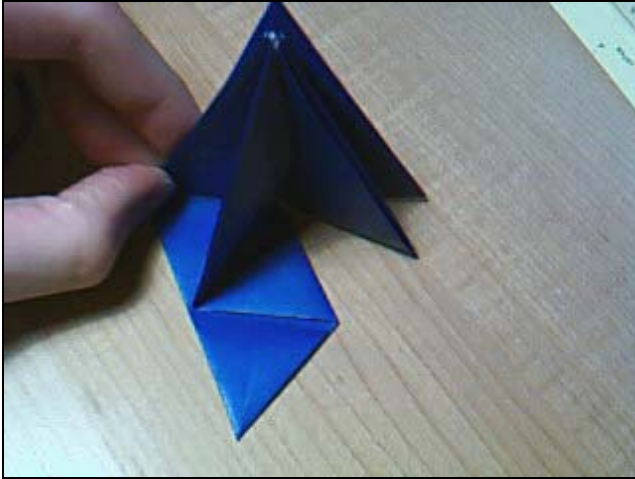


7. FOLD 1 FLAP HALFWAY DOWN, LIKE THIS.

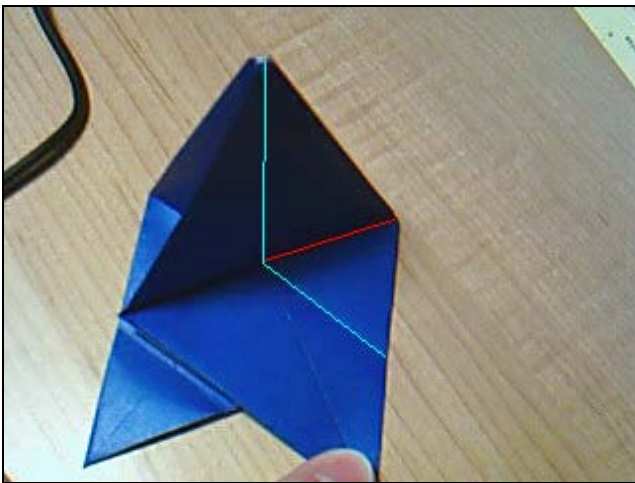




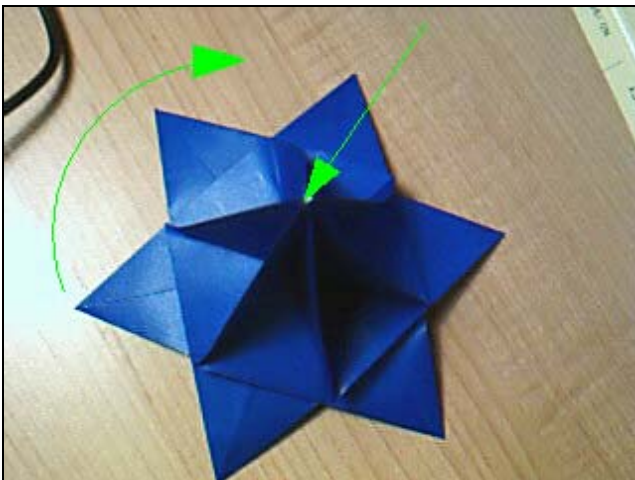
8. MAKE THE SWIVEL FOLD INDICATED BY THESE CREASES. REMEMBER, THE LIGHT BLUE ARE VALLEY FOLDS.



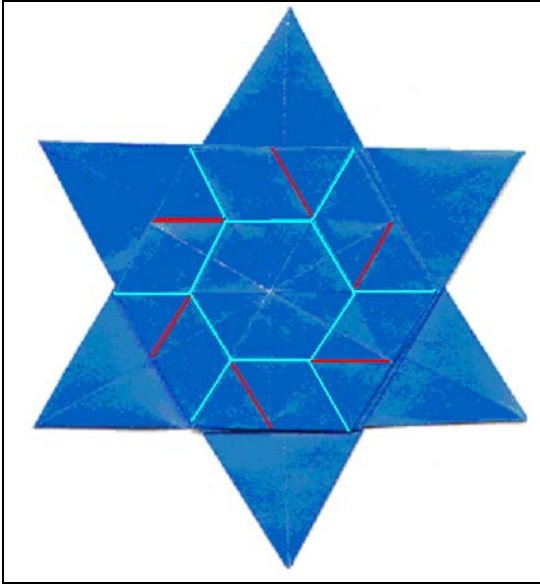
9. THIS IS THE RESULT. FOLD ANOTHER FLAP DOWN.



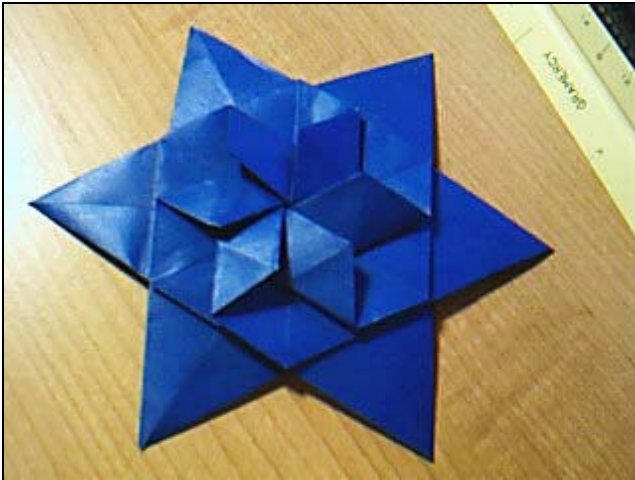
10. REPEAT STEP 8 AND 9 ON ALL 6 SIDES.



11. THESE IS THE RESULT. SQUASH THE HEXAGONAL PYRAMID, WHILE ROTATING IT CLOCKWISE AS IT FLATTENS.



12. THIS IS THE RESULT. SORRY THE PIC TURNED OUT POORLY. FOLD THE FLAPS AS THE CREASES INDICATE; THIS ROTATES THEM COUNTERCLOCKWISE, AND COLLAPSES THEM INWARD.



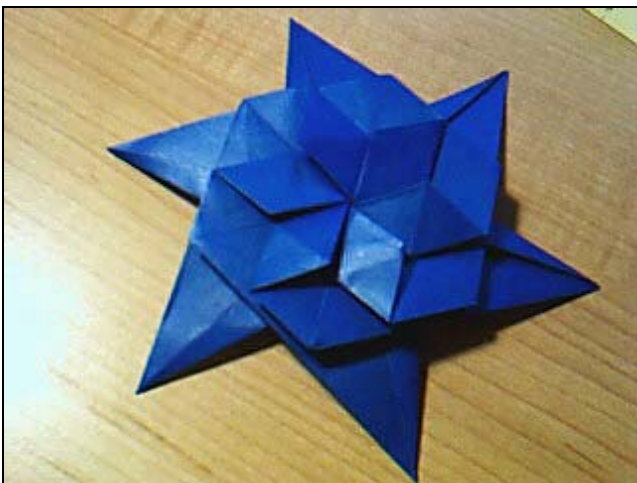
13. THIS IS THE RESULT. SPREAD OPEN LARGER FLAP.



14. IT LOOKS LIKE THIS. FOLD AS THE CREASES INDICATE; THIS NARROWS THE FLAP. IT IS ESSENTIALLY A REVERSE FOLD.



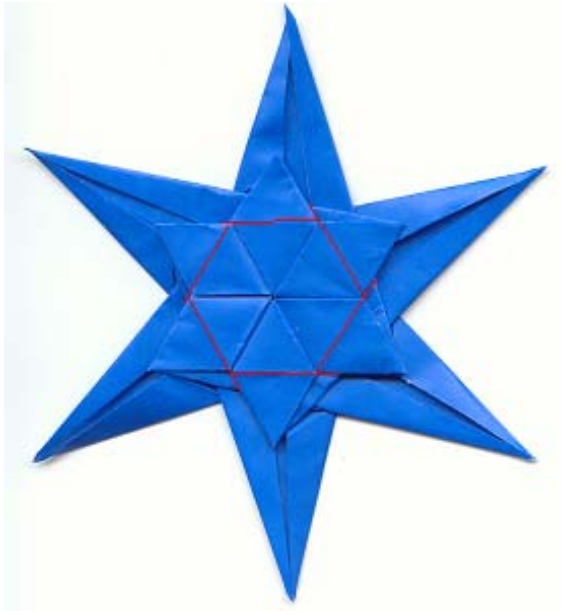
15. THIS IS THE RESULT. REPEAT ON ALL 6 SIDES.



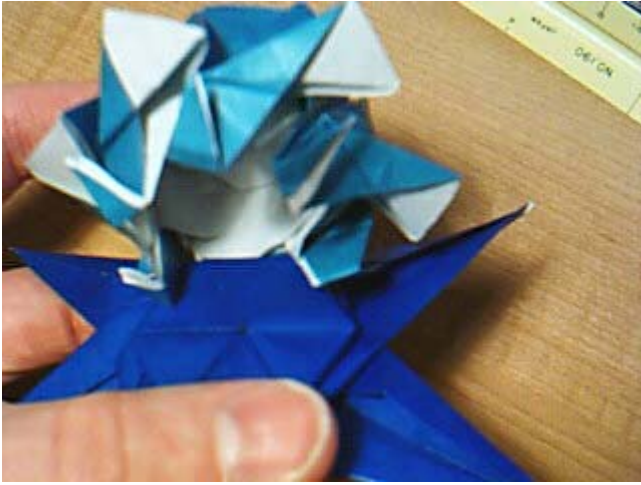
16. THIS IS THE RESULT.



17. FOLD THE OTHER EDGE OF A LARGE FLAP UNDERNEATH THE LAYERS ABOVE IT. THIS NARROWS THE FLAPS STILL FURTHER.



19. Fold the triangles under the top layer.



20. This is the result. The next steps show how to attach the calyx to the rose.



21. Fold the tips of the points back so they are folded in half.

22. Insert 1 flap into the pocket in the calyx. Repeat on all 6 sides. Note: this is difficult!



This is the result.



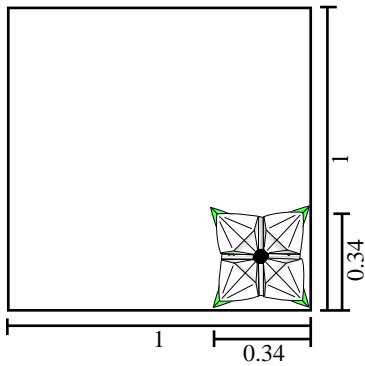
23. Curl and shape all the petals. Curl the leaves of the calyx. If desired. Pleat or crimp the leaves so they look more realistic.



This is the side view. Now just attach a stem and enjoy! Thanks for folding! :)

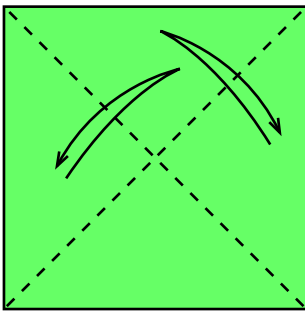
# Blossoming Flower

Design & Diagrams by Gerwin Sturm (2005/10/05)

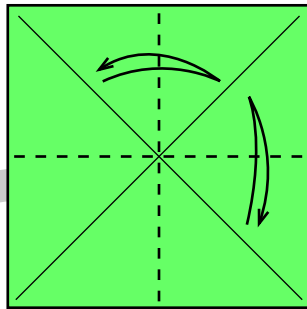


A 15cm square of standard Origami paper (Kami) or not too thick Duo-Kraft paper works nicely for this model.  
Colour-wise the combinations white-green or yellow-green give very nice results.

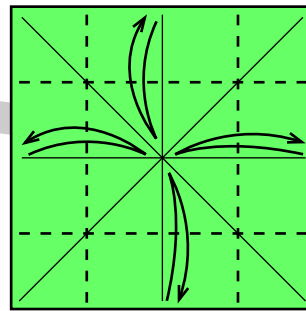
A 15cm square will give a flower about 5cm x 5cm in size.



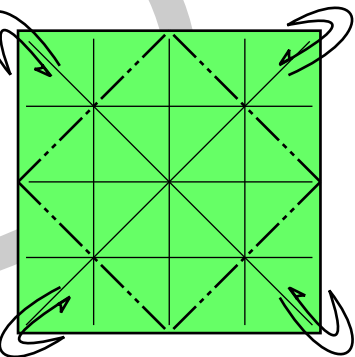
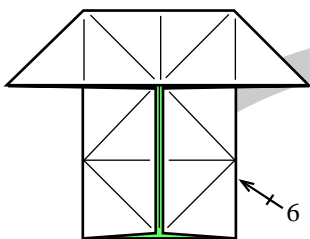
1. Fold and unfold the diagonals.



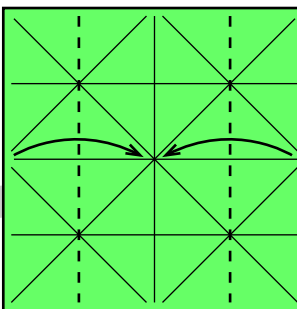
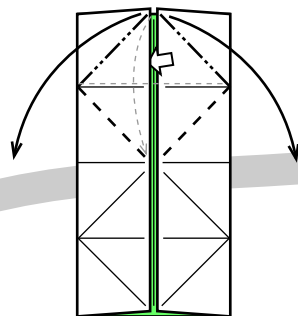
2. Fold and unfold in half both ways.



3. Fold and unfold the sides to the middle.



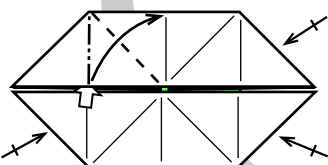
4. Fold and unfold the corners to the centre. (Mountain folds)



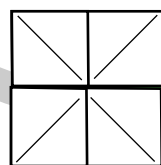
5. Fold the sides to the middle.

6. Fold the two corners outwards and flatten.

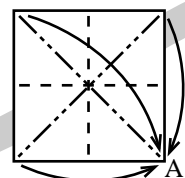
7. Repeat step 6 at the bottom.



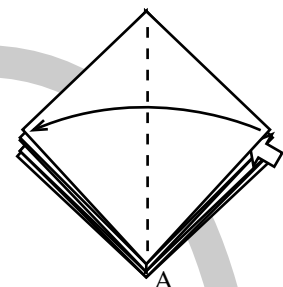
8. Squash fold the four corner flaps.



9. Turn over.

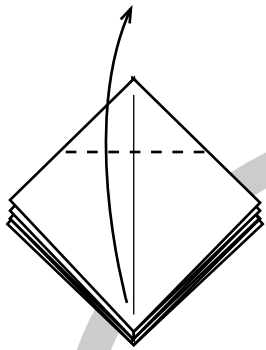


10. Preliminary base.

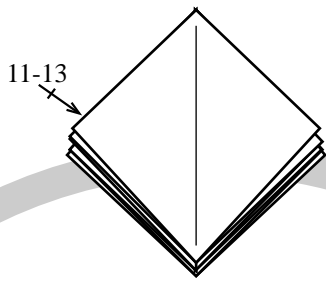


11. Fold one flap to the left.

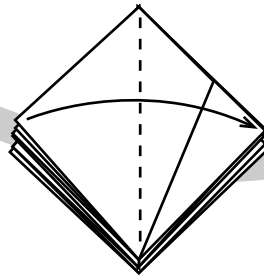




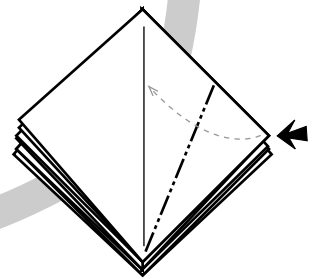
15. Fold one point up as far as possible.



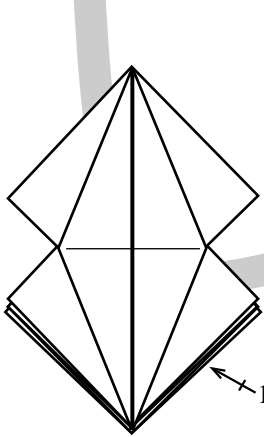
14. Repeat steps 11-13 on the left.



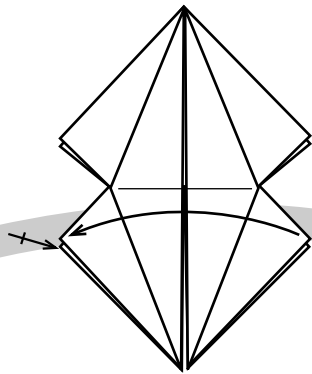
13. Fold one flap back to the right.



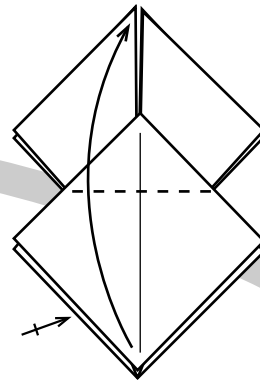
12. Reverse fold the corner to the middle.



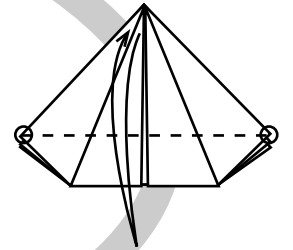
16. Repeat steps 11-15 behind.



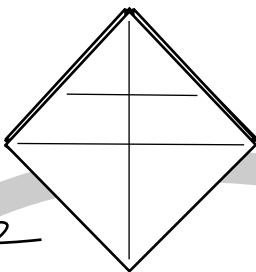
17. Fold two flaps to the left on the front, and two flaps the other way at the back, so that the layers stay equally distributed.



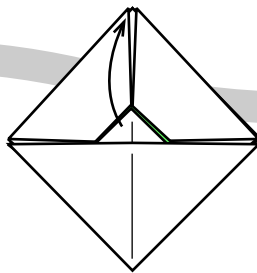
18. Fold the point up as far as possible. Repeat behind.



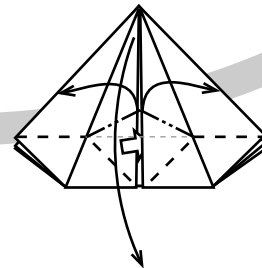
19. Fold an unfold. The crease should start exactly at the corners.



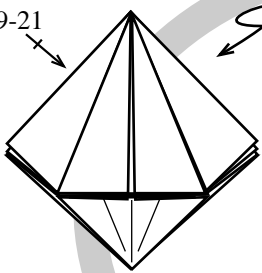
22. Turn over.



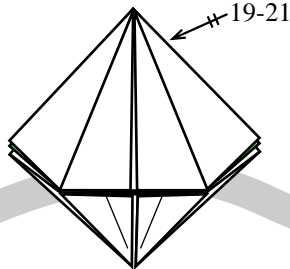
21. Pull out the corner.



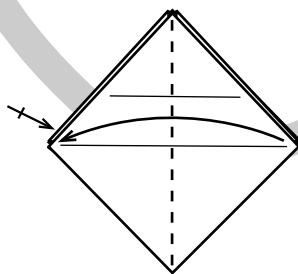
20. Fold the point down while opening out the middle layers.



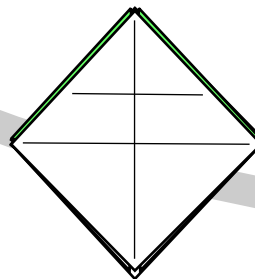
23. Repeat steps 19-21 on this side.



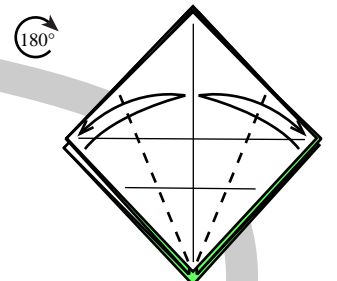
25. Repeat steps 19-21 on the front and at the back.



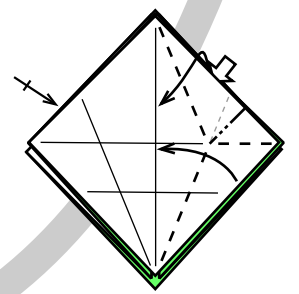
24. Fold one flap to the left on the front, and one flap at the back in the other direction.



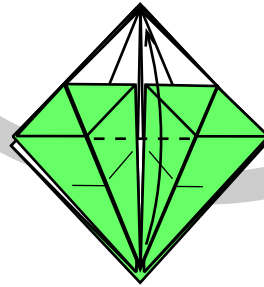
26. Rotate upside down.



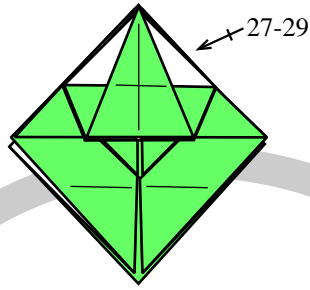
27. Fold and unfold the sides to the middle.



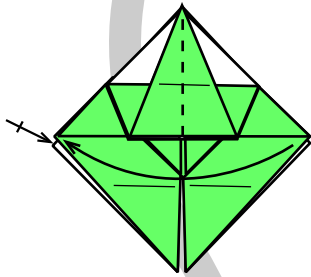
28. Fold the sides to the middle forming a rabbit ear. Repeat on the left.



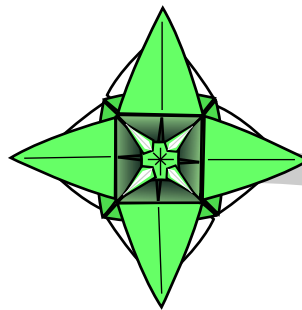
29. Fold the point up as far as possible.



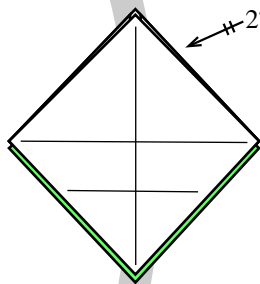
30. Repeat steps 27-29 behind.



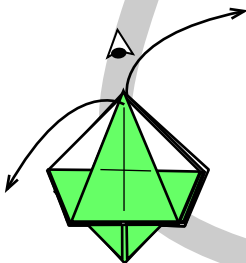
31. Fold one flap to the left on the front, and one flap at the back in the other direction.



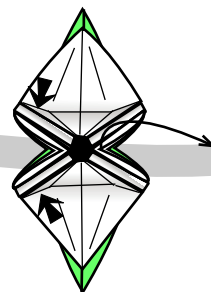
32. Repeat steps 27-29 on the front and at the back.



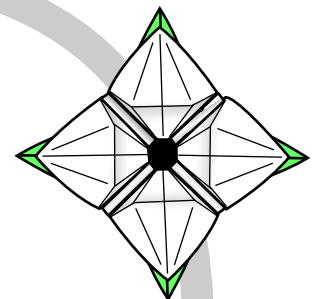
33. Open out two leaves (one white, one green) to the front. Repeat behind. Next view from above.



34. Hold the model together on the left and pull out the third set of leaves on the right.



35. Carefully open between the leaves and pull out the last set of leaves.



36. The finished model. Turn it over to see the very nice backside.

# Pterodactyl Peacockus

Design & Diagrams by Anna Kastlunger (2004/06/12)

