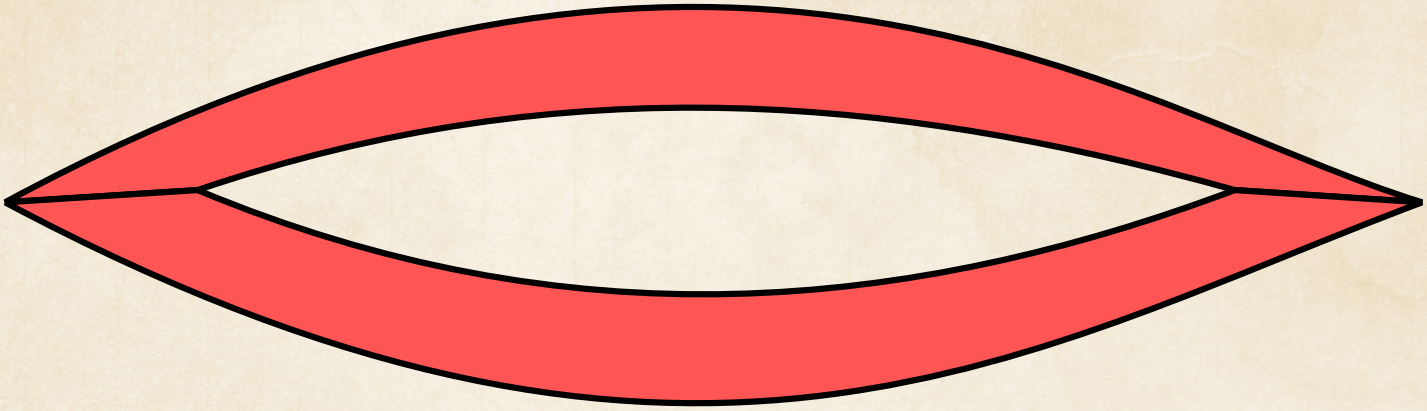
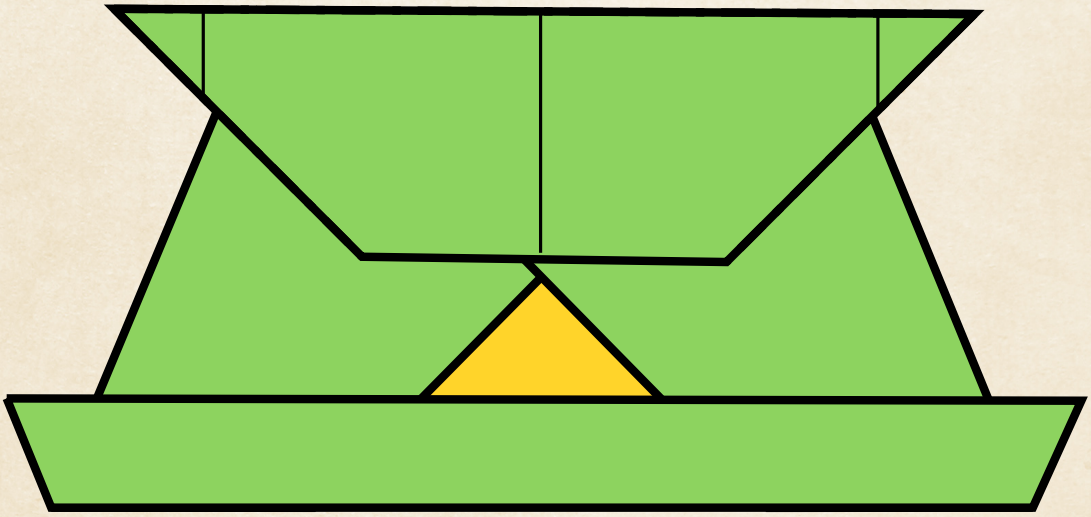
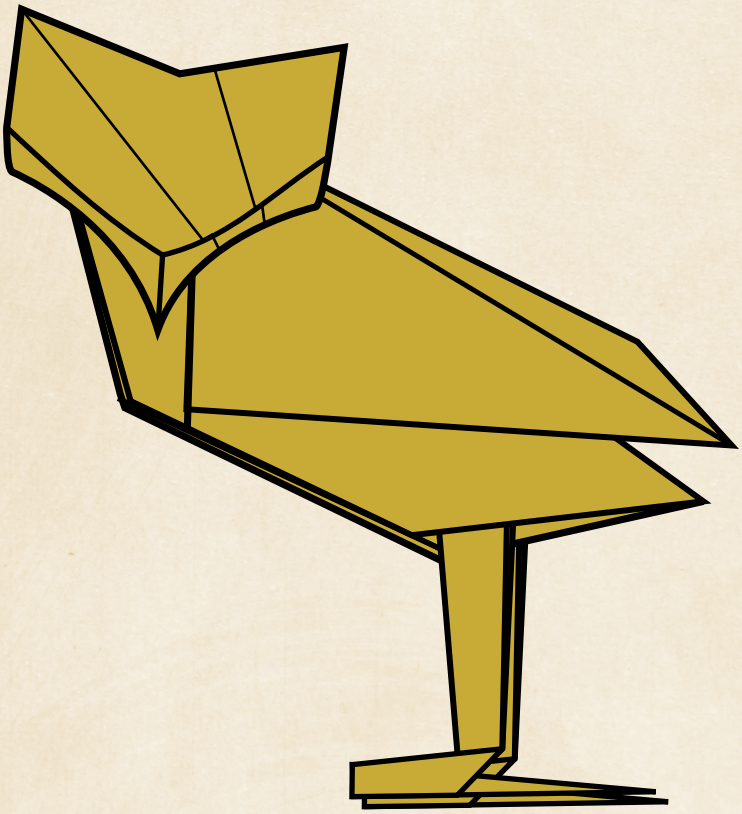
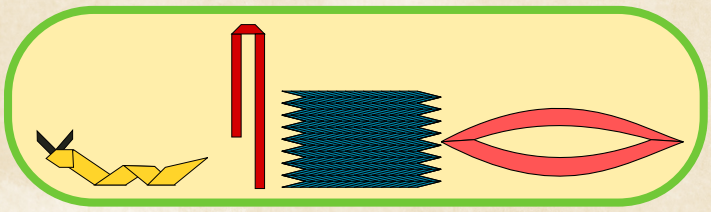








Contents

I Introduction 3

II Explanation 5

III Diagrams 7

ʿAyn - Arm 8

b - Foot 10

ʧ- Tethering Rope 12

d - Hand 14

e - iː - aɪ - Reed 16

f - v - Horned viper 19

k - Cup 22

g - Jar Stand 24

h - Twisted Wick 26

ʤ- Snake 28

l - Lion 30

m - Owl 34

n - Waves 37

p - Stool 39

ʠ - Hill 42

r - Mouth 44

s - Folded cloth 46

ʃ- Pool 47

t - Loaf 48

w - Quail Chick 50

z - Door Bolt 53

IV Designs from the challenge 55

V Internet Links 60

VI Acknowledgments 62

Part I

Introduction

19 September 2018.

It's been 4 years since I created any origami.

It's not like I stopped origami. I got involved in two different origami clubs, went to a few conventions. I still liked origami.

But I found myself tired of creating anything new. Why bother creating an animal that's already been done so many times? Why bother spending hours optimizing a crease pattern when I could just fold someone else's design?

It's with all those questions —— and more —— in mind that I kept doing origami, waiting for an idea to magically appear. My friends from the origami group of Soupetard/Toulouse (our Instagram is at the end of the book, if you want to drop us a follow) know that I often had ideas all too well, but most of them were unrealistic: some were just too difficult, others would take too much time to be done, and I can admit that I have been lazy with the last ones.

I am a member of the Big Origami Joust, a group of folders who challenge themselves with a specific theme. And on the 19th of September, I decided to take part in one of these challenges. I can't explain why, but I knew I wanted to. The seven other folders were all skilled ones: Eric Vigier, Fred Sab, Daniel Bermejo Sánchez, João Charrua, Alizée Glasser, Roman Diaz and Victor Manuel Nuñez Riaguas (a link to their galleries can be found at the end). So I got in.

The voted theme was *"Historical" with a "legendary" variation*. With all the interrogations I still had in mind, I just couldn't create something purely representative. I wanted something that could carry some meaning to me, and interesting enough to keep me entertained until the folding is done. But even with all the will I had, I couldn't find any idea. Days went on, and the situation wasn't evolving.

And one week passed without any idea growing on me. I knew I liked the Norse mythology imagery, with its human-like Gods fighting on wastelands, and Egyptian history, its aesthetic and their praises to their Gods. But it was all but a precise idea. I was talking to a friend about it, and she told me "What about hieroglyphics?". Now it was clear: I had to fold hieroglyphics! They are what represent Ancient Egypt the most, but still have some mysteries in them. After refining the idea a bit more, my goal became clearer: I wanted to teach how to fold hieroglyphics.

This book is the result of this challenge. It was produced over a short span of two weeks, while working full-time, preparing for a sport event, and having other various social obligations. I spent most of my free time on it, drastically reducing my sleep and impeding my social life. Please keep that in mind while reading it. But I haven't done it alone. All my wonderful friends helped on it: they created the template for the book, helped me proofreading the diagrams and the text, gave me their honest opinions on all the models, and most of all: kept my motivation up!

Vincent Achard

Part II

Explanation

I won't lie: after this small book, you will not be able to write hieroglyphics like Egyptians used to. You will only learn the basics of it.

Reading hieroglyphics is easy. They can be read left to right, right to left or up to down. To identify the orientation, you just have to find a hieroglyphic with a head: it will always face the opposite of the reading direction. And if two hieroglyphics are stacked, they must be read from top to bottom. That's all.

Now understanding them is another deal. Hieroglyphics can be of two sorts:

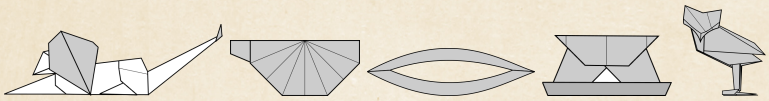
- Phonetic: these ones represent more or less complex sounds. For instance, a **Lion** represents the sound **L**, and a **Beetle** represents the sound **HPR**. They are the ones taught in this book.
- Idiomatic: these are more figurative. A **Lion** will represent a **Lion**. They are differentiated from phonetic ones with symbols, or with the context of the sentence. I won't be teaching any of them in this book.

One thing to note is that hieroglyphic writing doesn't use vowels, spaces or punctuation. It makes its reading a bit difficult. But let's take a simple example.

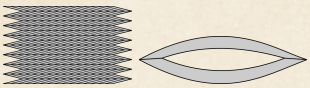
The sentence to translate is **I like origami**.

After removing the vowels and the spaces, all that remains is **l-k-r-g-m**.

And you will learn later that: L ⇒ Lion, K ⇒ Cup, R ⇒ Mouth, G ⇒ Jar Stand and M ⇒ Owl. Then **I like origami** is:



Let's use a harder example. My name is **Achard**, and the **d** is mute. Since we are using phonetical hieroglyphics, the translation is **ch-r**. The hieroglyphics for my name is:



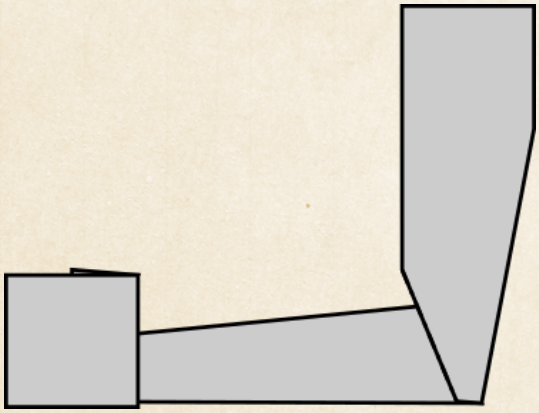
And this is all I will teach you here. I won't risk writing more as I am not an historian, and I don't want to share any wrong knowledge. What I described is just the tip of a way larger iceberg. If you are interested in learning more, you can find complete — but still not so hard — lessons about the real hieroglyphic writing, it is really fascinating and bigger than I thought.

Now let's get to the folding!

Part III

Diagrams

Ayn - Arm

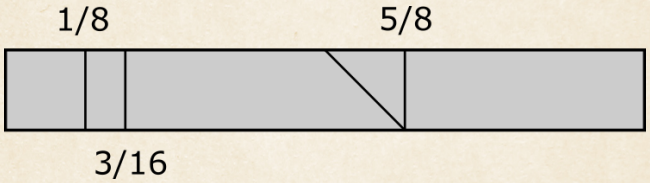


Arm

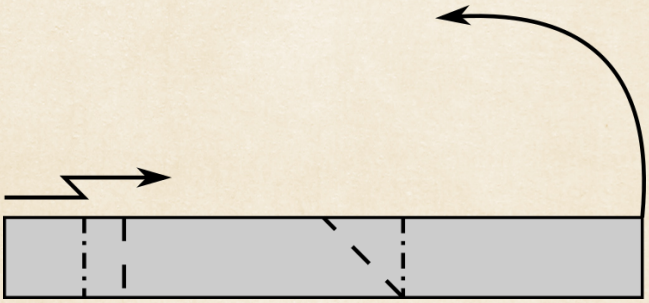
Phonetic: Ayn

Paper dimension: 1x8

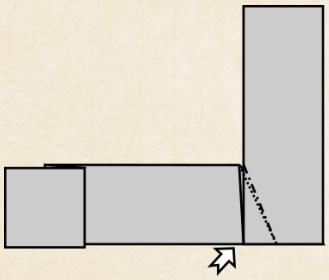
Ratio: 0.5



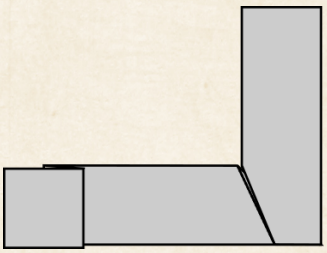
1. Fold along the indicated references, and an angle bisector at the 5/8 reference



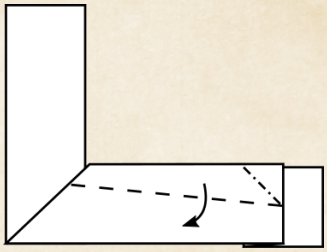
2. Crimp the left part of the strip, swivel at the middle, all using existing creases.



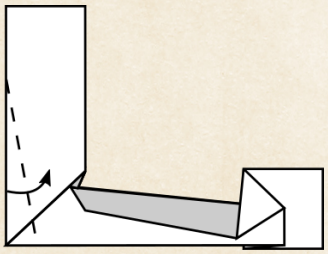
3. Inside reverse fold with no exact references.



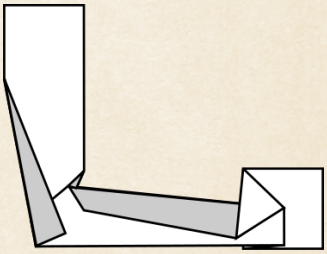
4. The result. Turn over the model.



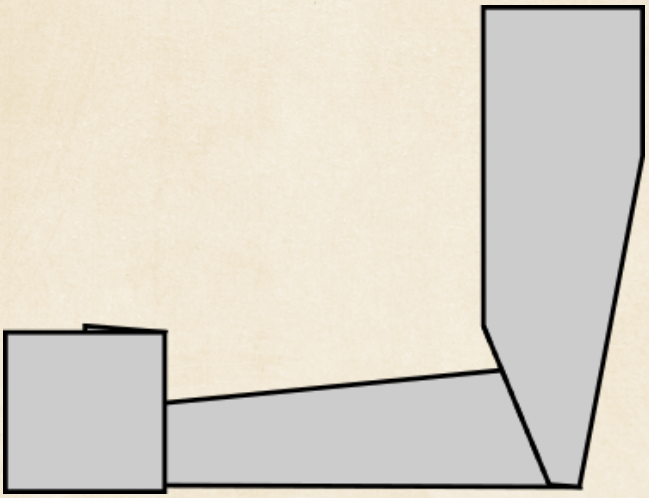
5. Swivel fold along the for-arm, this will shape the hand.



6. Fold along the arm, with no exact reference.

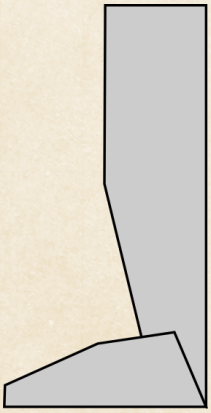


7. The result. Turn over the model.



8. The final result.

B - Foot



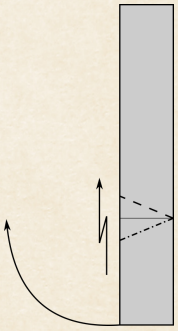
Foot

Phonetic: b

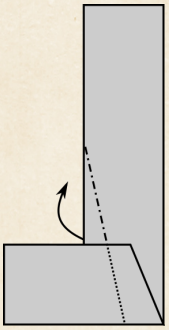
Paper dimension: 1x6

Ratio: 0.7

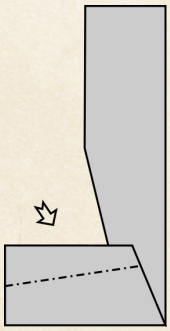
1. Fold the given reference line.



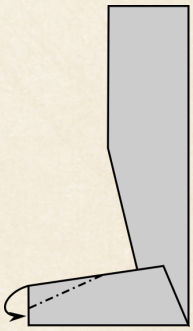
2. Swivel fold along the previous reference.



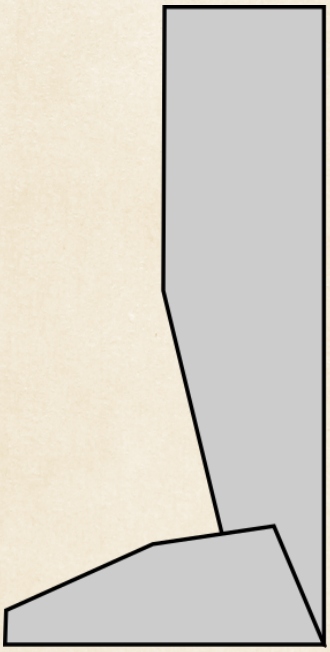
3. Fold back to thinner the tibia.



4. Do some sort of open sink to shape the foot.

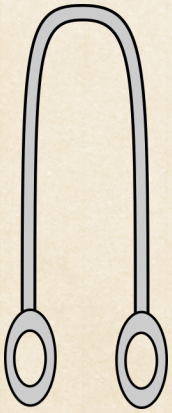


5. Fold back to shape the front of the foot.

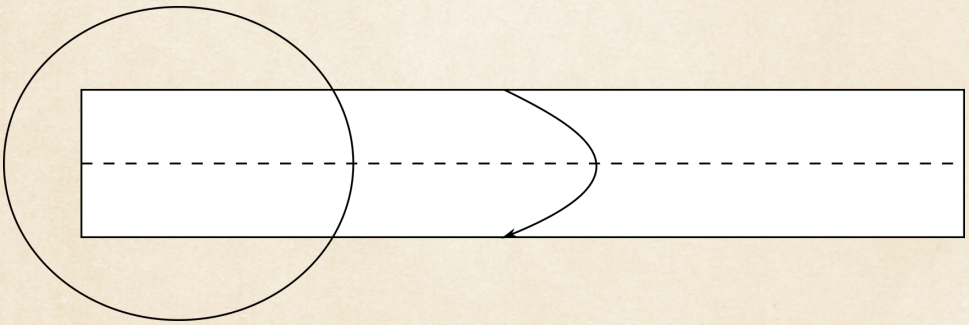


6. The final result.

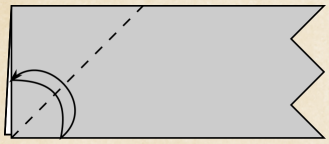
ʧ- Tethering Rope



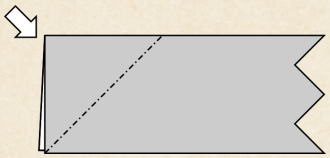
Tethering Rope
Phonetic: ʧ
Paper dimension: 1x8
Ratio: 0.4



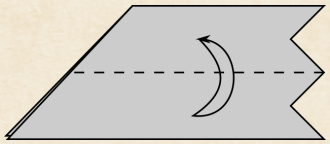
1. Fold the paper in half.



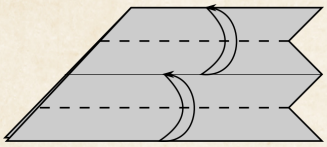
2. Fold and unfold an angle bisector.



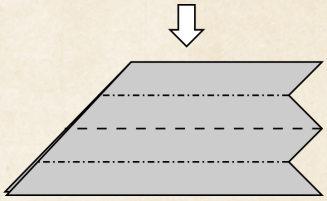
3. Inside reverse fold.



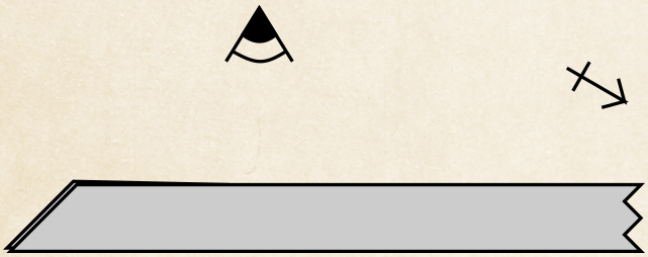
4. Fold in half. Unfold.



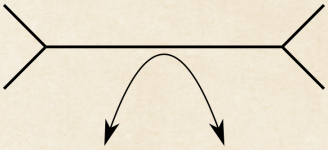
5. Now divide in fourth.



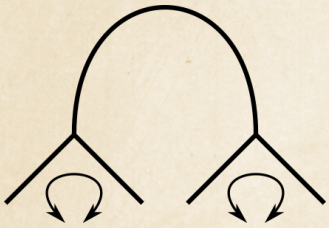
6. Open sink in and out.



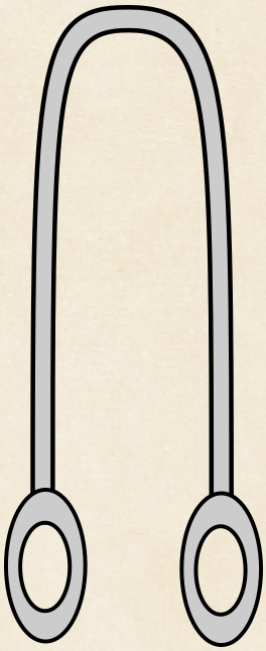
7. Soak the model and crumple it. It must look like a big rope. Spread the layers apart. The next step is a stick drawing of the result



8. Round the model in half.

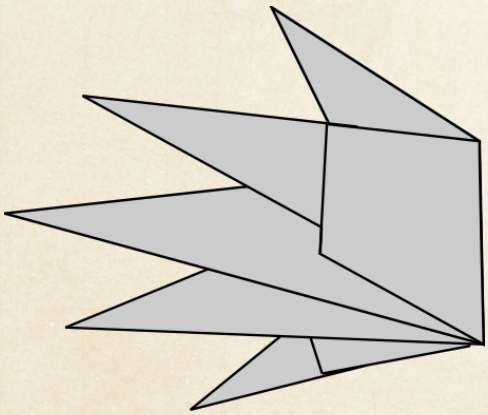


9. Circle the bottom parts.

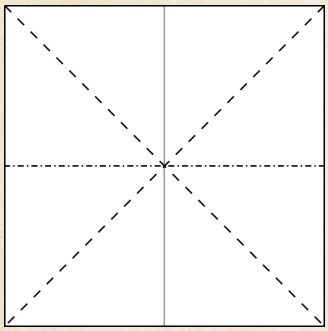


10. Dry the model while making sure it stay in its position. The final result

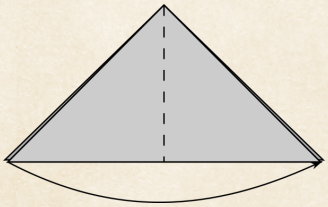
D - Hand



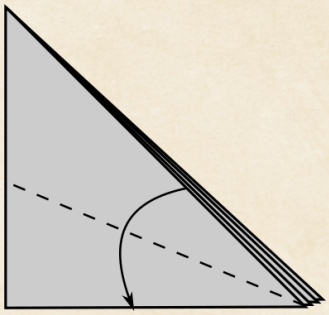
Hand
Phonetic: d
Paper dimension: 1x1
Ratio: 0.5



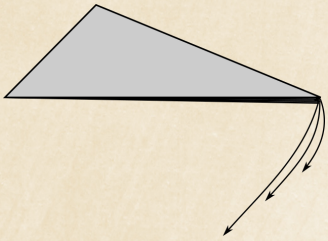
1. Fold a waterbomb base.



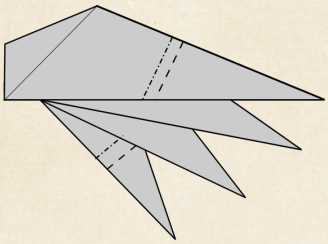
2. Fold all the layers to the right.



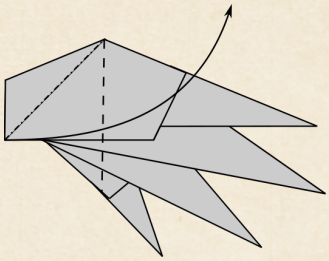
3. Fold all the layers in half.



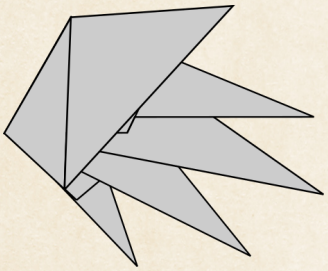
4. Pull out and swivel all the layers to shape four of the fingers.



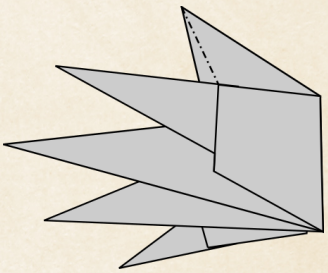
5. Do two crimps: a small one on the top for the index, and one bigger for the auricular.



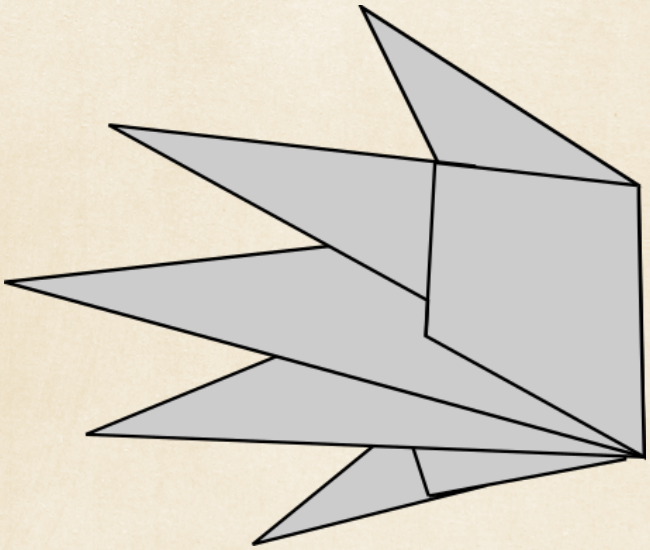
6. Petal fold what will be the thumb.



7. The final result. Turn the model over.



8. Thinner the thumb, and rearrange the fingers if needed.



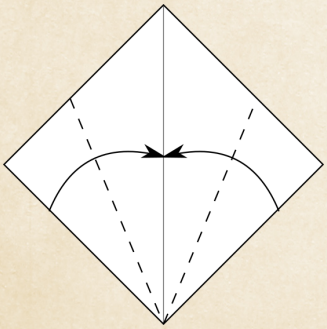
9. The final result.

E - I: - AI - REED

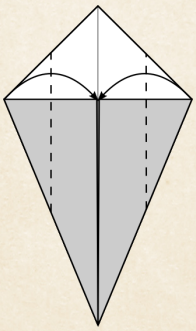
Reed

Phonetic: one reed: e - i:, two reeds: ai **Paper dimension**: 1x1

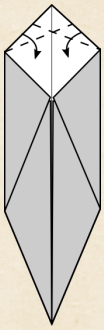
Ratio: 0.6



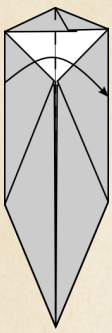
1. Fold a kite base.



2. Fold the two corners to the center.

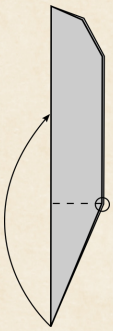


3. Fold a rabbit ear at the top. No need to be precise, it just need to be symmetrical.

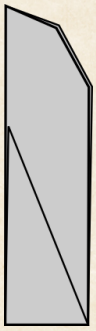


4. Fold the model in half.

5. Fold inside to round the corner.

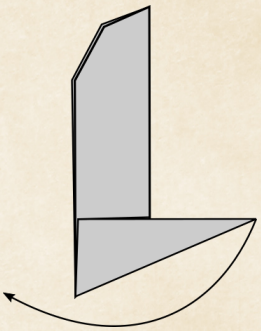


6. Fold the bottom point up using the shown references.

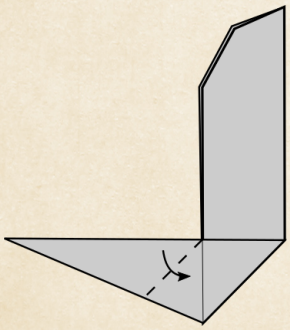


7. The reference. Return the model.

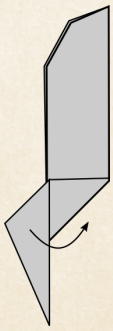
8. Fold an angle bisector on half of the layers, rotating the previously folded point.



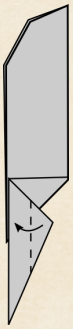
9. Unfold the step 7.



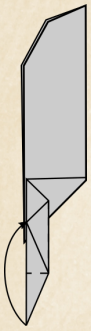
10. Fold an angle bisector.



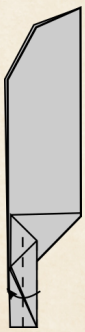
11. Refold the step 7.



12. Fold the bottom part in half.



13. Fold the point up.

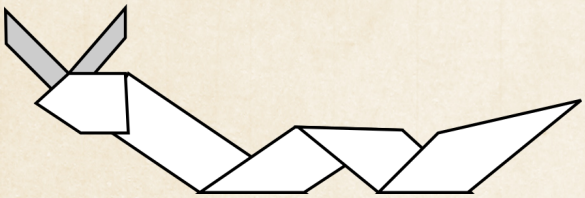


14. Fold in half one last time.

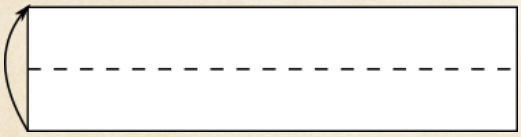
15. The result. Return the model.

16. The final result.

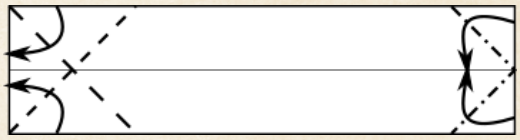
F - V - Horned viper



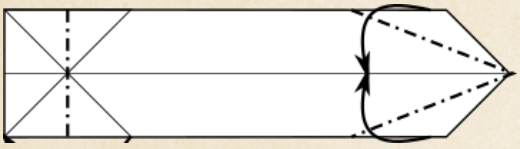
Horned Viper
Phonetic: f or v
Paper dimension: 1x4
Ratio: 0.6



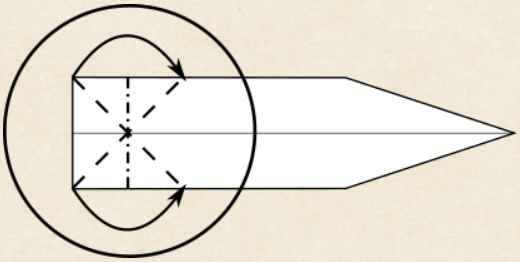
1. Fold in half and unfold, snake color up.



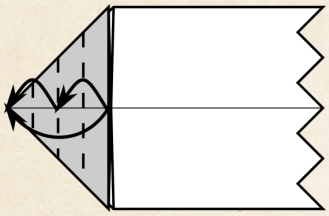
2. Fold the two angle bisectors on the left part of the paper, and crease along the previously made fold on the right part.



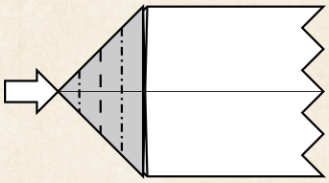
3. End the precreasing of the waterbomb base on the left, and keep folding angle bisector on the right part.



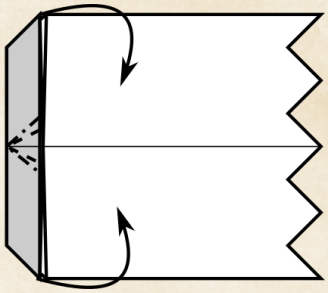
4. Fold the precreased waterbomb base.



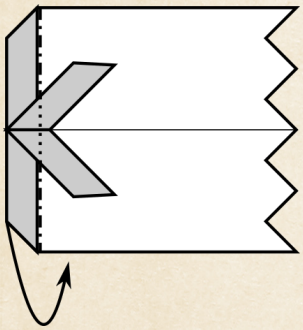
5. Fold and unfold the waterbomb base in fourth.



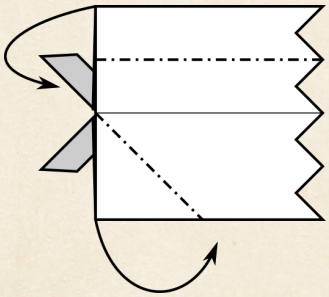
6. Sink in and out.



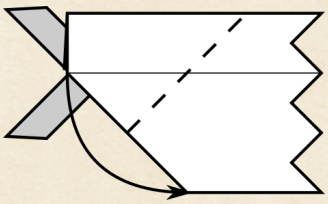
7. Pleat the two points on the back.



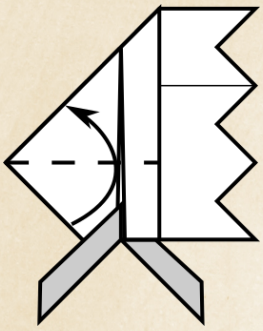
8. Mountain fold along the sunken waterbomb base to hide it from the front.



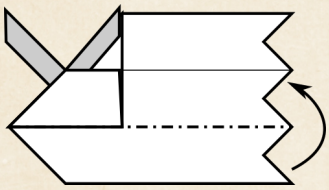
9. On the top: fold along the middle crease, on the bottom: mountain fold an angle bisector.



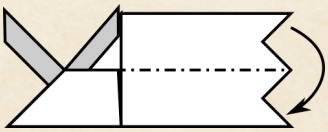
10. Valley fold using the shown reference.



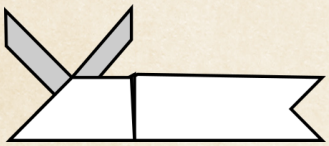
11. Fold the big layer up.



12. Mountain fold the bottom to the middle crease.

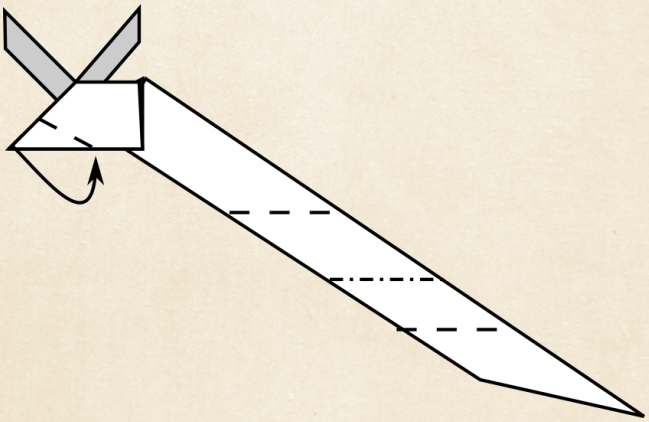


13. Mountain fold all along the middle crease.

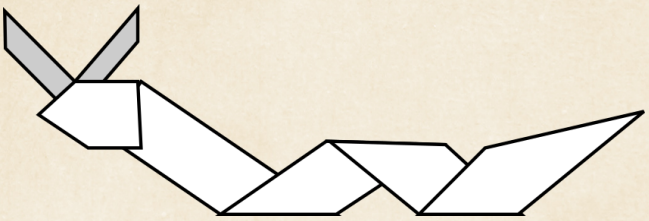


14. The head is shaped.
Back to the whole snake.

15. Swivel fold the tail down.

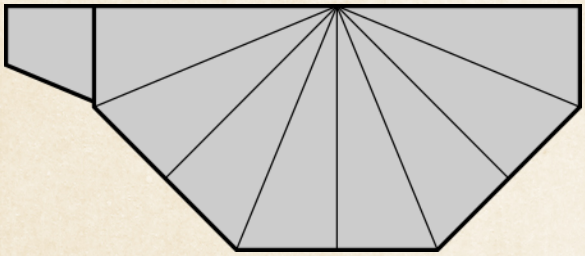


16. Shape the head and the body.

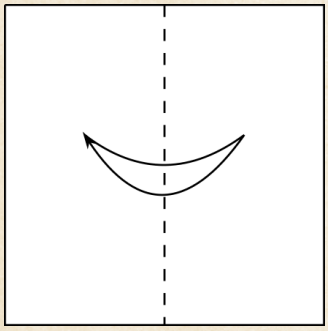


17. The final result.

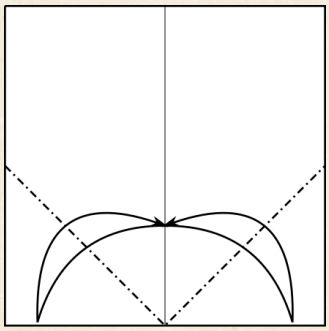
K - Cup



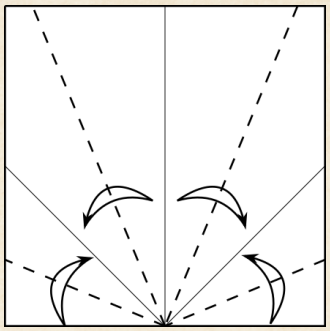
Cup
Phonetic: k
Paper dimension: 1x1
Ratio: 0.7



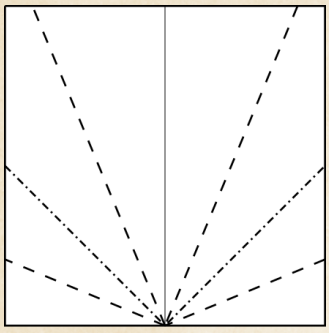
1. Fold in half. Unfold.



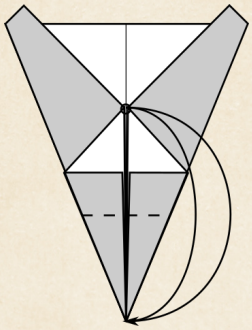
2. Mountain fold the angle bisector of the previous fold. Unfold.



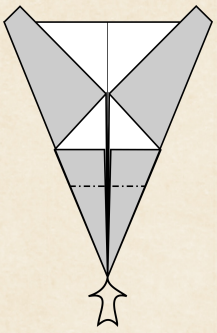
3. Valley fold the angle bisector of the previous fold. Unfold.



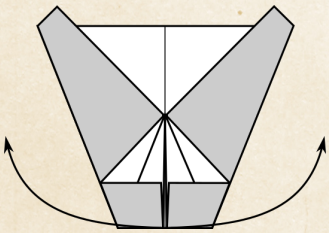
4. Pleat as shown.



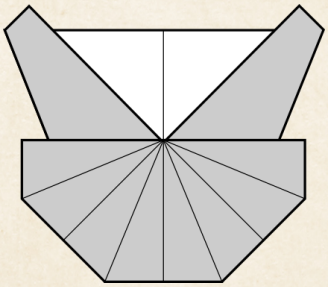
5. Fold firmly through all the layers using the reference point.



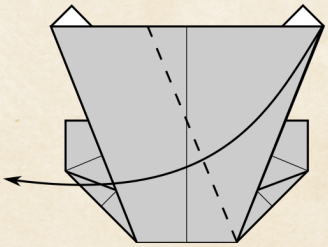
6. Open sink.



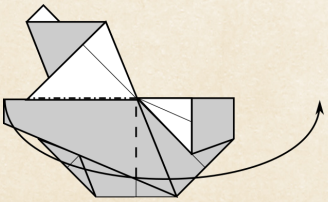
7. Open the previous sink, and flatten it.



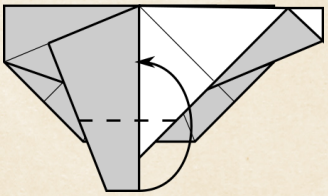
8. The result. Turn over the model.



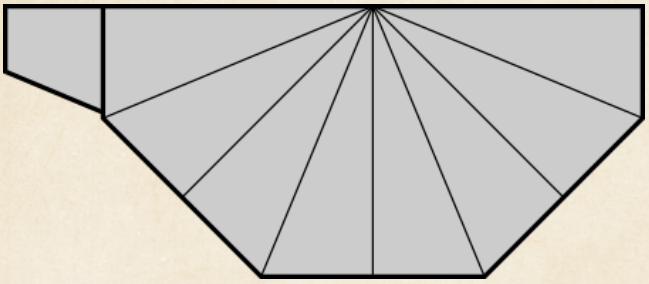
9. Fold the right layer as far as possible.



10. Swivel fold using the shown references.

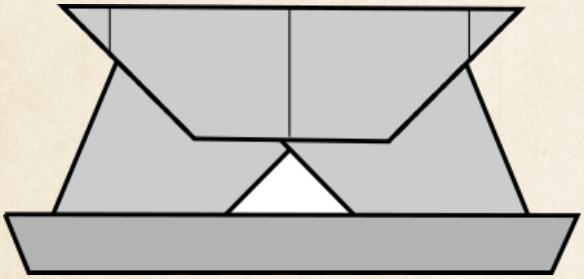


11. Fold the layer up just to hide it from the front.

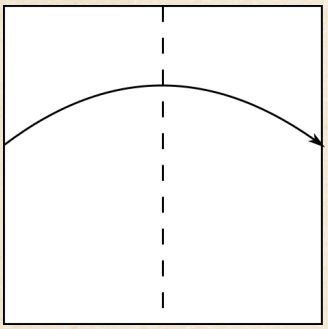


12. The final result.

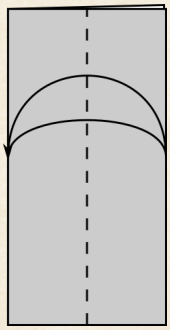
G - Jar Stand



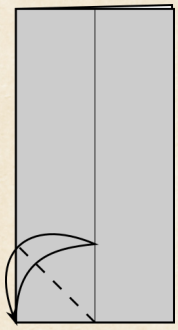
Jar Stand
Phonetic: g
Paper dimension: 1x1
Ratio: 0.4



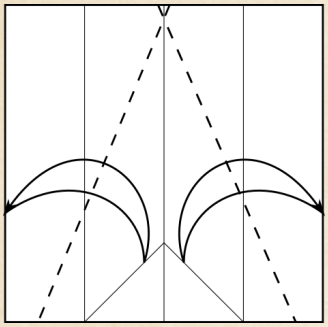
1. Fold in half, revealing the stand's color.



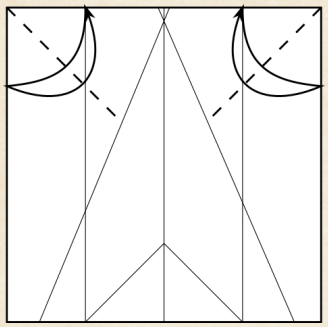
2. Fold in half through all layers.



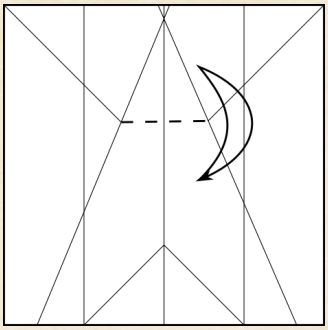
3. Fold along the previous crease. Unfold everything.



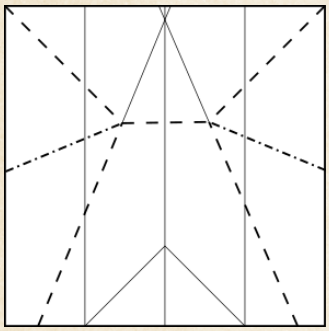
4. Fold angle bisector by bringing the sides of the square along the previous creases.



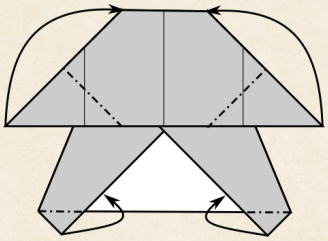
5. Fold the top angle bisectors, stopping when they meet the previous folds.



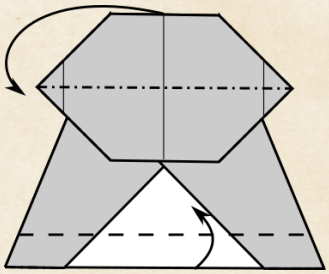
6. Valley fold joining the intersections of the two previous angle bisectors.



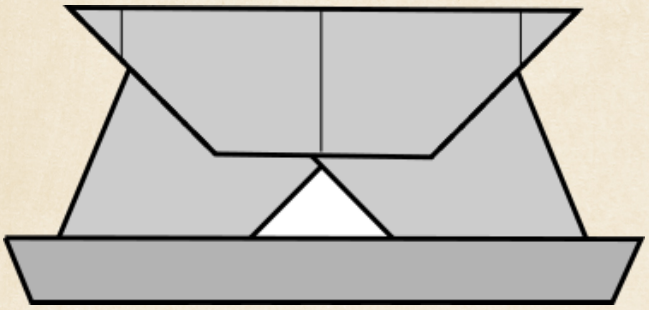
7. Fold and collapse using the existing creases.



8. Mountain fold the top triangles, and mountain fold the bottom layers to line everything up.

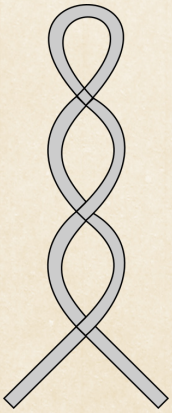


9. Fold the top shape in half. Fold the bottom up. There is no reference point, but look at the next step to get an idea of how the result should look like.

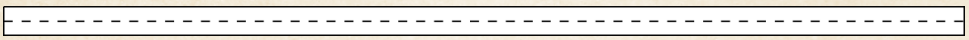


10. The final result.

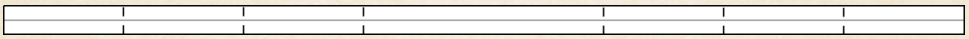
H - Twisted Wick



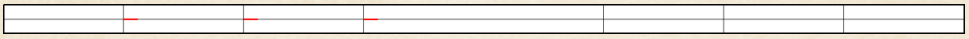
Twisted Wick
Phonetic: h
Paper dimension: 1x32
Ratio: 0.4



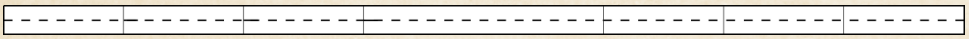
1. Fold in half. Unfold.



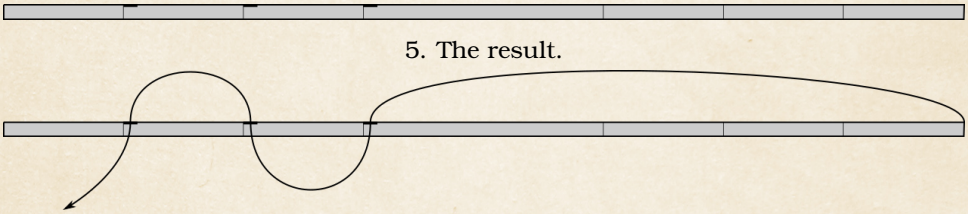
2. Divide the paper in eighth, but do not markfold the middle.



3. Cut where indicated. It must be wide enough to fit the strip foled in half.

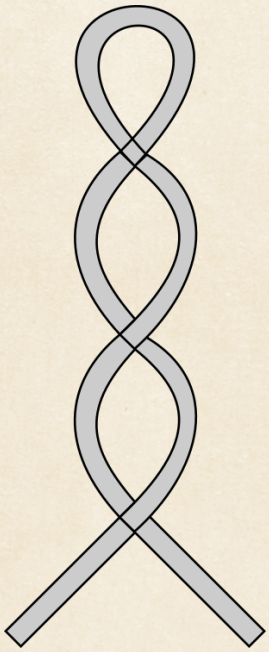


4. Fold in half.



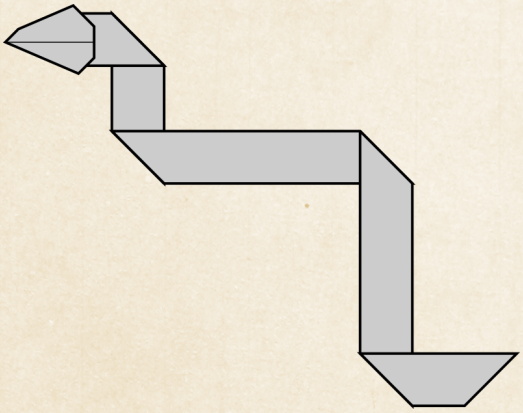
5. The result.

6. Thread the strip through the holes. Shape the result.

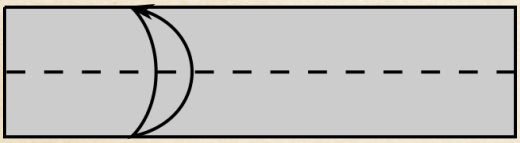


7. The final result.

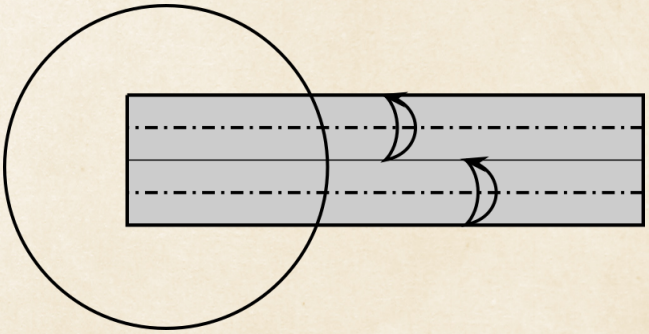
ʤ- Snake



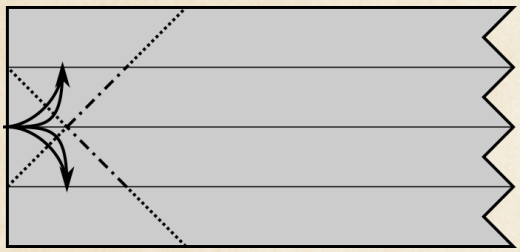
Snake
Phonetic: ʤ
Paper dimension: 1x4
Ratio: 0.5



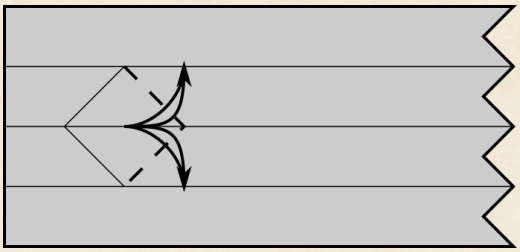
1. Snake color up, fold the paper in half and unfold.



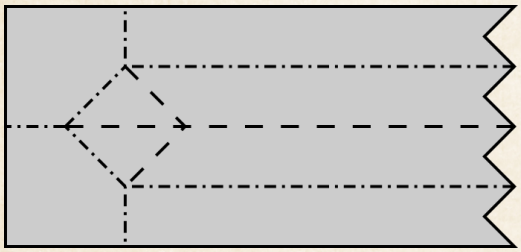
2. Mountain fold the strip in fourth. The next steps focus on the left part of the paper.



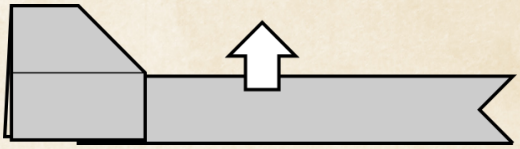
3. Crease part of the shown diagonal. Mountain fold.



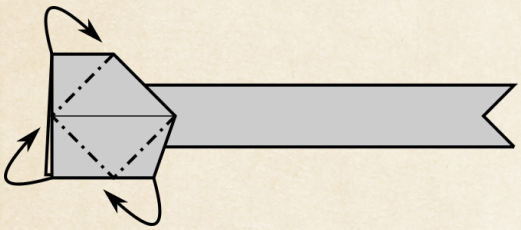
4. Valley fold to complete a perfect square with the folds made step 3.



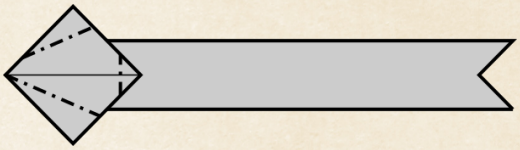
5. Collapse all along the paper as shown. The result is shown next step



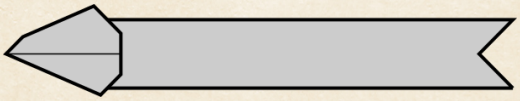
6. Move the body up or the head down so they line up as shown next step.



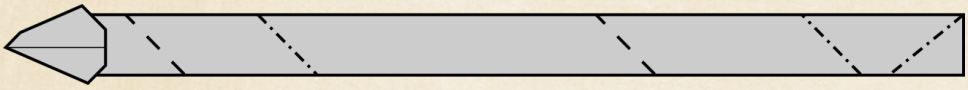
7. Add folds to the head so it looks like a square.



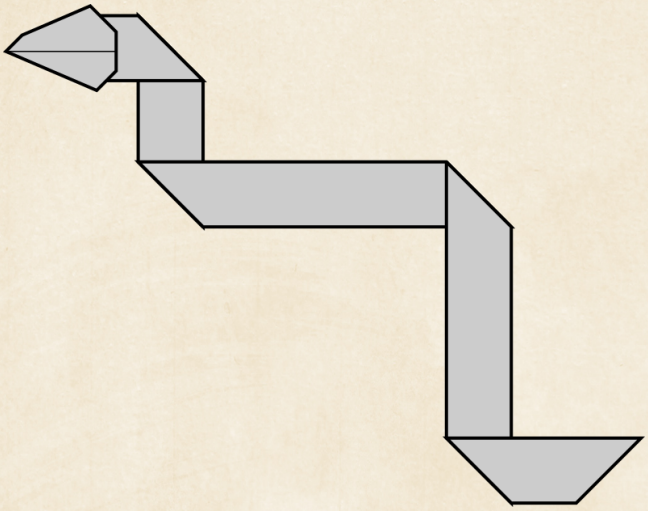
8. Now shape the head to make it look like a snake.



9. The expected result.

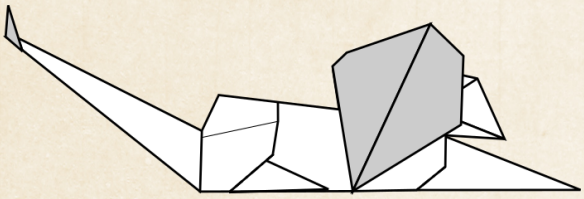


10. Alternate valley and mountain folds to shape the body.

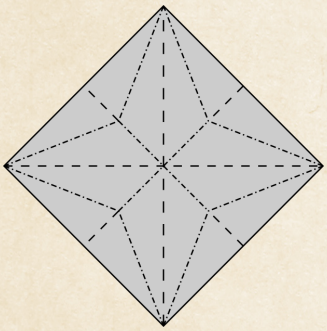


11. The final result.

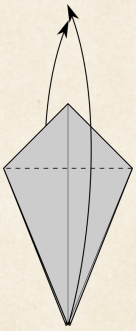
L - Lion



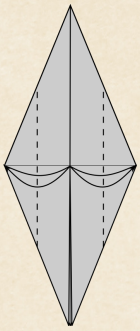
Lion
Phonetic: l
Paper dimension: 1x1
Ratio: 0.4



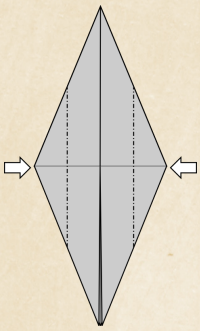
1. Fold a bird base, all four points down, mane color up.



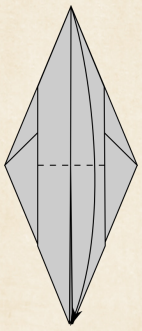
2. Fold the front and the back points up.



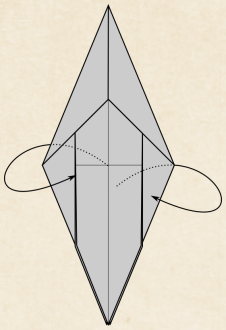
3. Fold in half the front point...



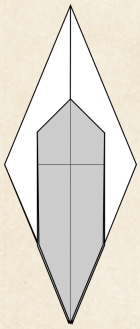
4. ... and open sink it.



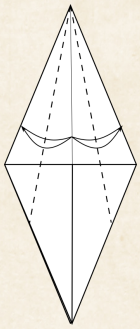
5. Fold the point down.



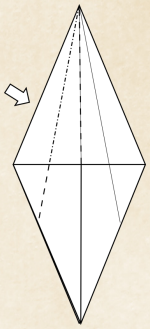
6. Wrap the layers of the back point on the opposite. It will bring the body color the the rest of the bird base. Return the model.



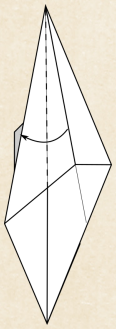
7. The expected result.



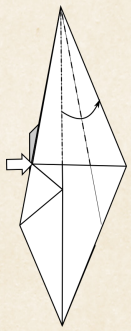
8. Fold and unfold the angle bisectors.



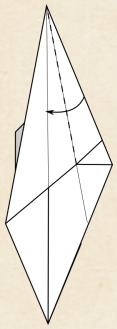
9. Squash on the left layer using existing creases.



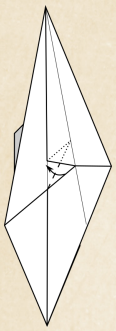
10. Fold the layer to the left...



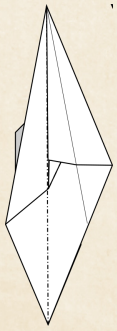
11. .. and squash it while swivelling the middle to the right of the model.



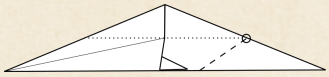
12. Fold the creating layer to the middle.



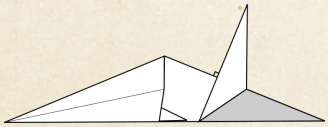
13. Reverse fold, creating the back leg.



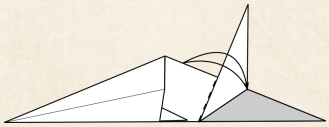
14. The expected result.



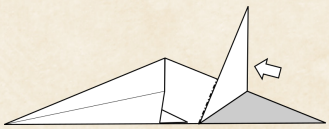
15. Fold the front point up. The crease must start at the given reference point (the sink made step 4) and make the point perpendicular to the rest of the model.



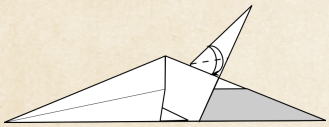
16. How the previous fold should be.



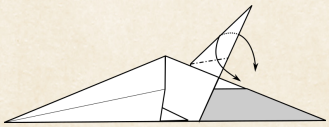
17. Fold and unfold the front layer along the point.



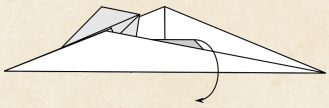
18. "Sink" the point. The result will look like a crimp.



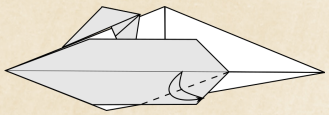
19. Fold and unfold an angle bisector.



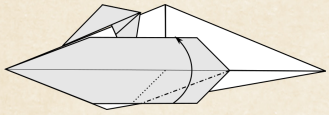
20. Outside reverse fold using the previous creases. Return the model.



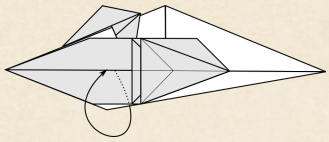
21. Fold down two layers.



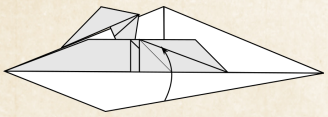
22. Fold the angle bisector.



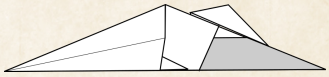
23. Double squash fold the layer.



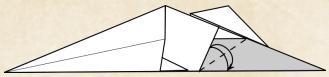
24. Wrap the white layer to hide the grey layers.



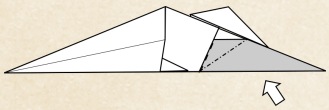
25. Fold the layer up. Return the model.



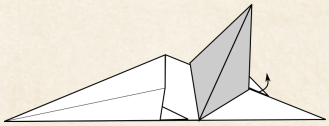
26. The result.



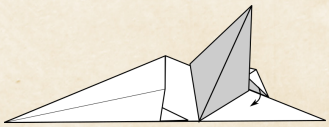
27. Fold and unfold the mane colored layer along the previous fold...



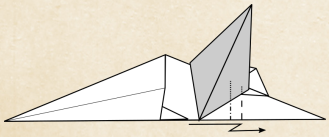
28. .. and squash it over.



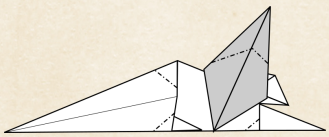
29. Bring the back layer of the head up (you will need to do a swivel fold on the back).



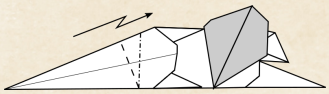
30. Bring the colored layer down.



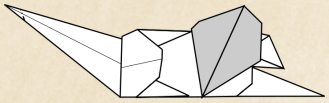
31. Pleat the front leg.



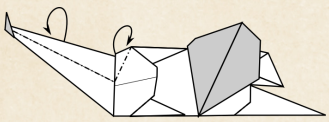
32. Shape the mane, and the legs.



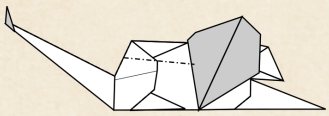
33. Swivel fold through all the layer the back. The next step show the expected result



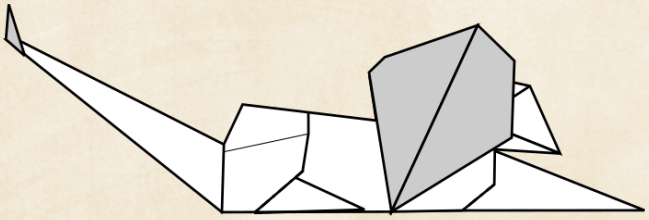
34. The expected result. Outside reverse fold the top of the tail to show some color.



35. Fold the tail in half, and at the same time, shape the back.

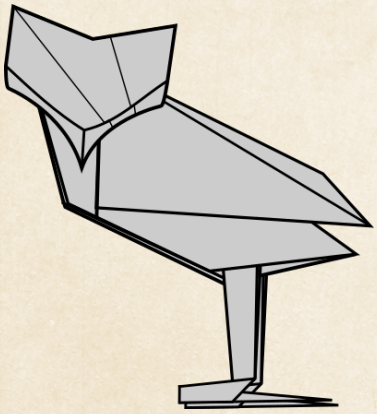


36. Shape the top of the body with a mountain fold.

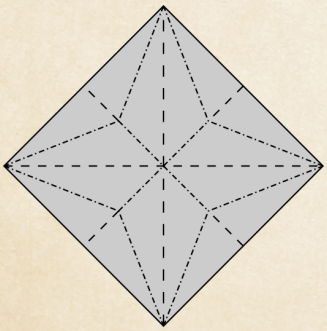


37. The final result.

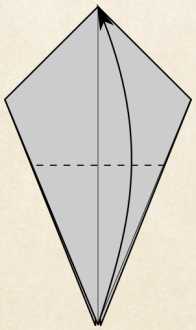
M - Owl



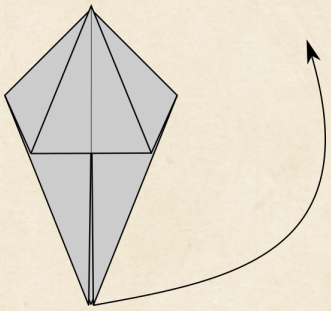
Owl
Phonetic: m
Paper dimension: 1x1
Ratio: 0.3



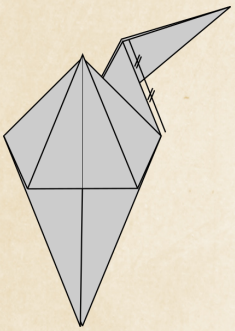
1. Fold a bird base, all four points down.



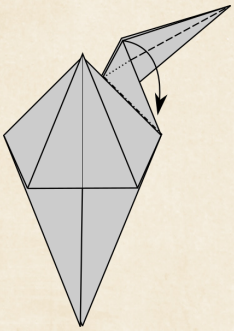
2. Fold the lower point to the top.



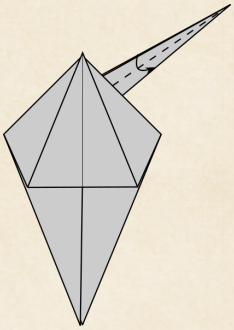
3. Swivel the right point upward, using the reference shown next step.



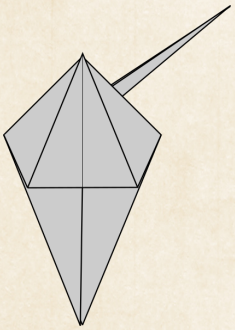
4. The reference.



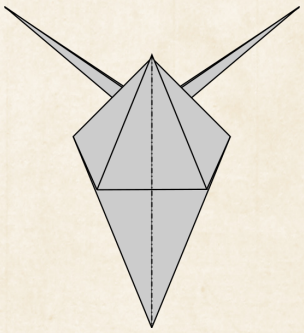
5. Inside reverse fold, narrowing the point in half, and hiding layers inside. Repeat behind



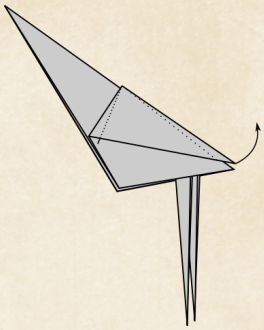
6. Thinner the point. Repeat behind



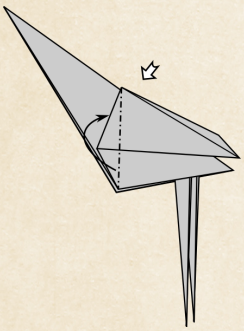
7. Repeat step 3 to 6 on the left.



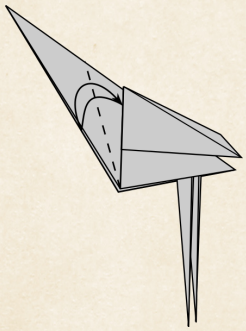
8. Fold the model in half.



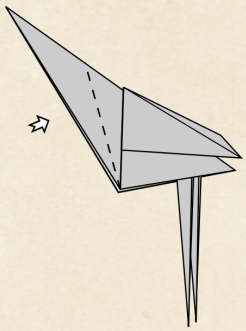
9. Swivel the top layer making it asymmetrical.



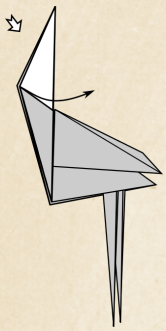
10. Mountain fold the wing inside using the shown references.



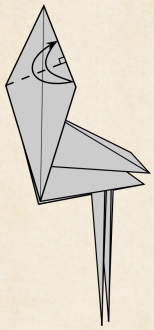
11. Fold an angle bisector.



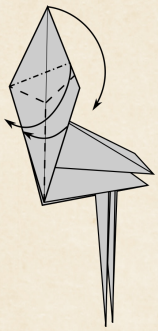
12. Double inside reverse fold using the previously made creases.



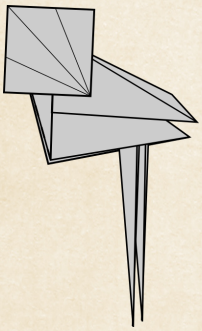
13. Fold the top layer to the right.



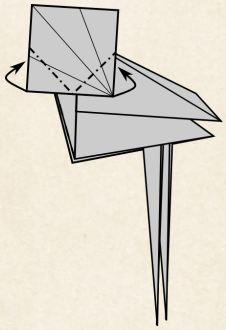
14. Fold the point. The crease must start at the angle, and be perpendicular to the top



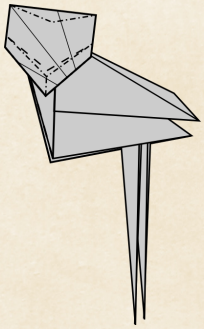
15. Pleat the point using the crease made the previous step. At the same time, rabbit ear fold the bottom part



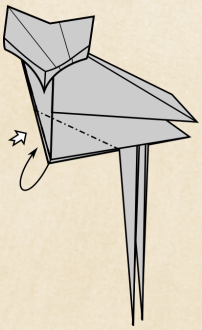
16. The expected result.



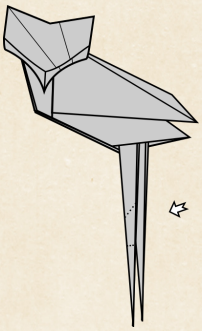
17. Narrow the bottom of the square.



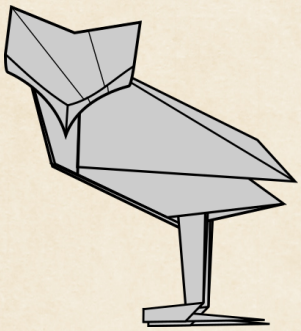
18. Shape the beak with a crimped rabbit eared fold. Shape the top of the head



19. Fold the belly layers inside.

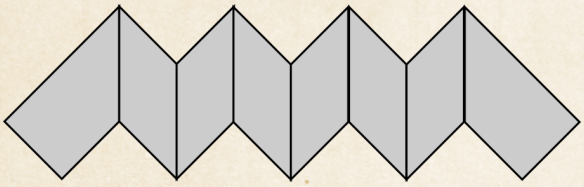


20. Crimp the legs.

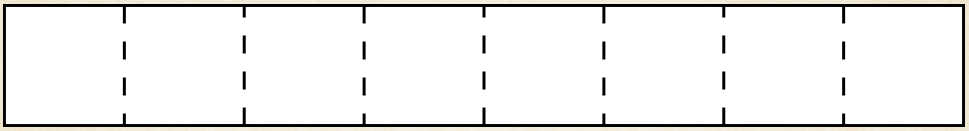


21. The final result.

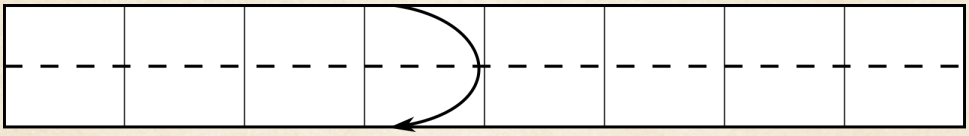
N - Waves



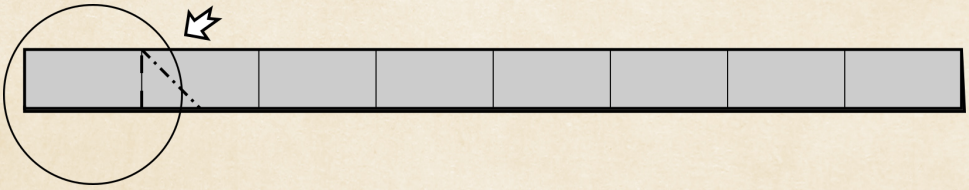
Waves
Phonetic: n
Paper dimension: 1x8
Ratio: 0.4



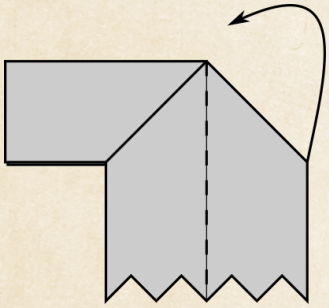
1. Divide the paper in eighth.



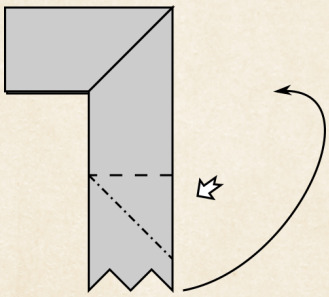
2. Fold the paper in half.



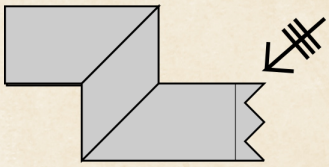
3. Squash fold as shown.



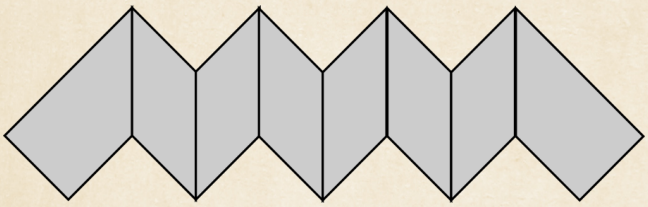
4. Fold the model in half.



5. Crimp the model.

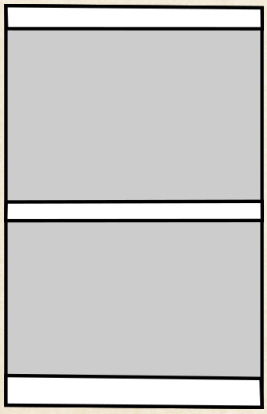


6. Repeat steps 3 to 5 3 times.

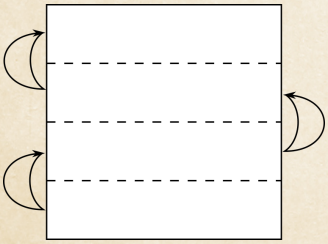


7. The final result.

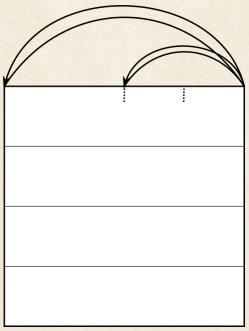
P - Stool



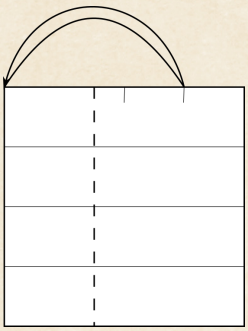
Stood
Phonetic: p
Paper dimension: 1x1
Ratio: 0.4



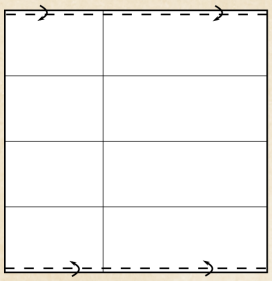
1. Stool's cushion color up. Divide the paper in fourth.



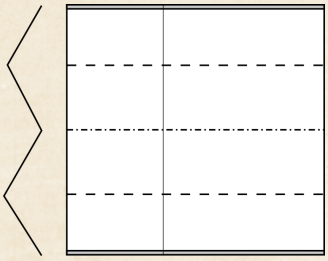
2. Get the 3/4 reference.



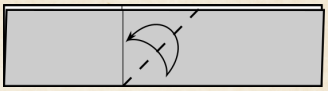
3. Bring the left corner on the reference. Fold and unfold



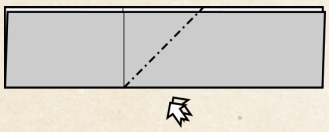
4. Fold a small strip of paper on the top and the bottom. Don't panic, the reference don't have to be perfectly followed.



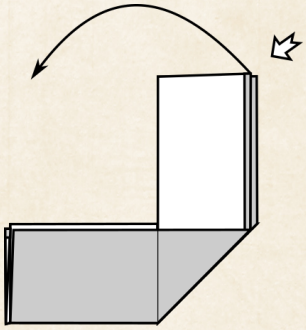
5. Fold in accordion.



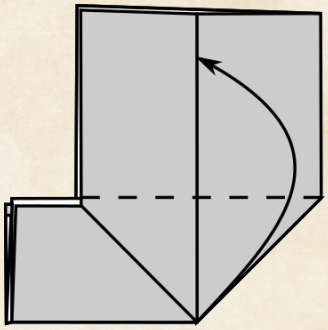
6. Fold and unfold an angle bisector.



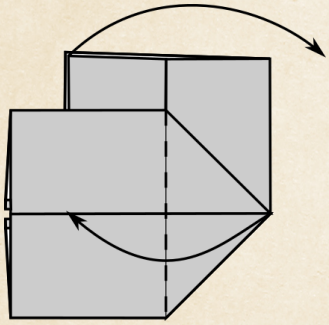
7. Double inside reverse fold.



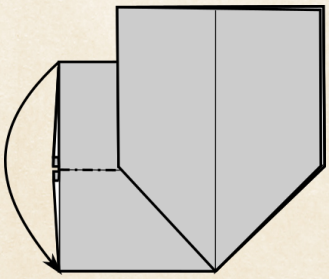
8. Fold on layer to the left.



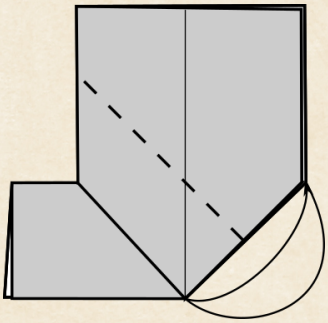
9. Fold one layer to the top.



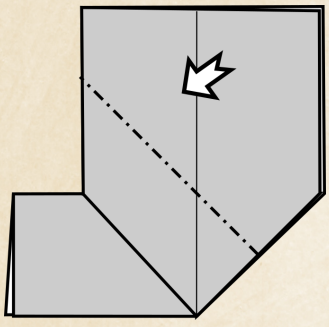
10. On the front. Bring one layer to the left. On the back, rotate one layer to the right.



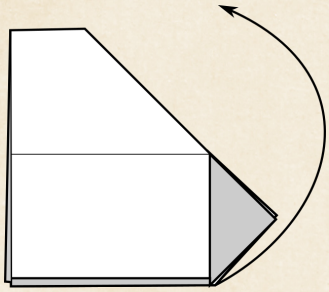
11. Fold one layer on the back to the bottom.



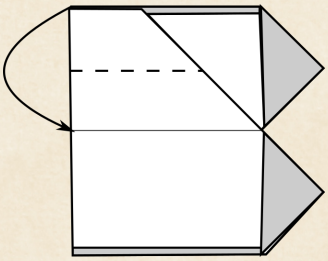
12. Fold and unfold.



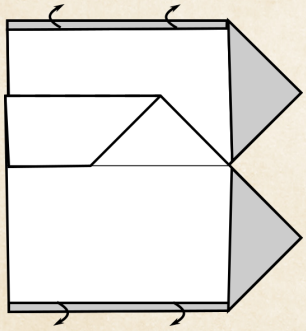
13. Outside reverse fold.



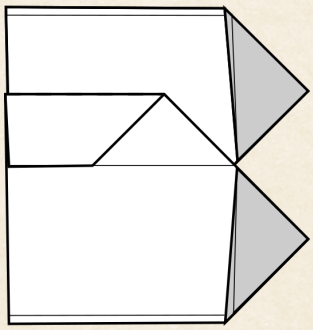
14. Bring two back layers to the top.



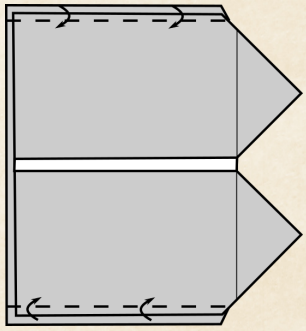
15. Fold the flap in half as a lock.



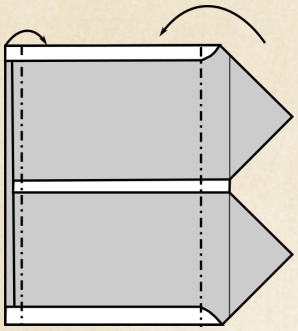
16. Unwrap the layers. Try no to tear down the paper. It will not be clean on the sides, but it will not be visible on the final result



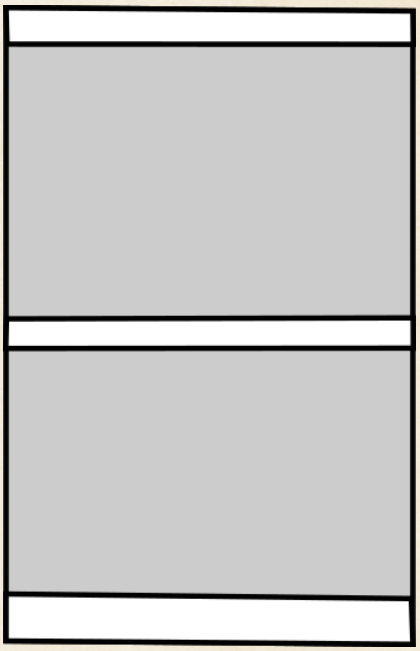
17. LThe result. Return the model.



18. Fold the top to reveal a color change that should be as big as twice the stripe folded at step 4. Repeat on the bottom.

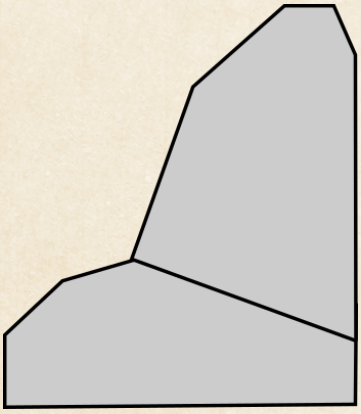


19. Fold back the sides of the model.



20. The final result.

ϙ - Hill

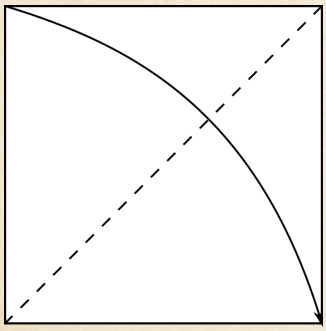


Hill

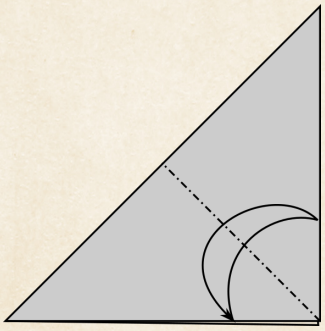
Phonetic: k (letter ϙ)

Paper dimension: 1x1

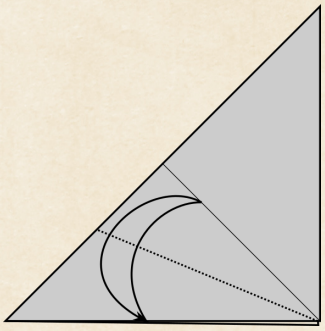
Ratio: 0.6



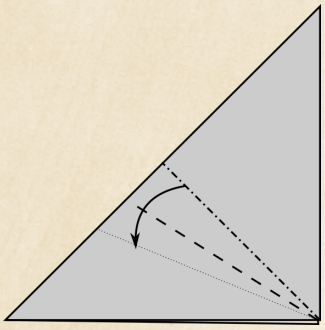
1. Fold in half.



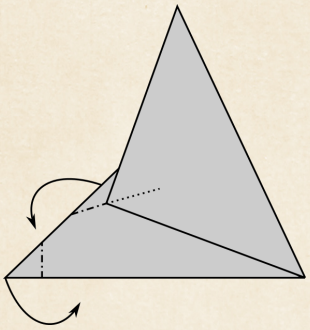
2. Mountain fold an angle bisector.



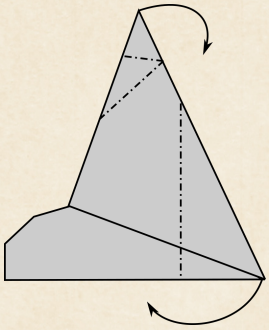
3. Crease lightly a second angle bisector.



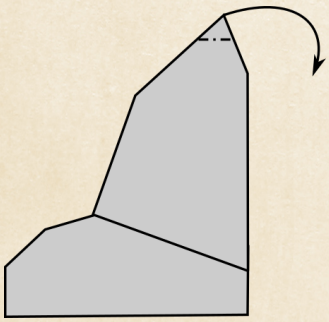
4. Swivel fold the fold made step 2 along the crease made step 3.



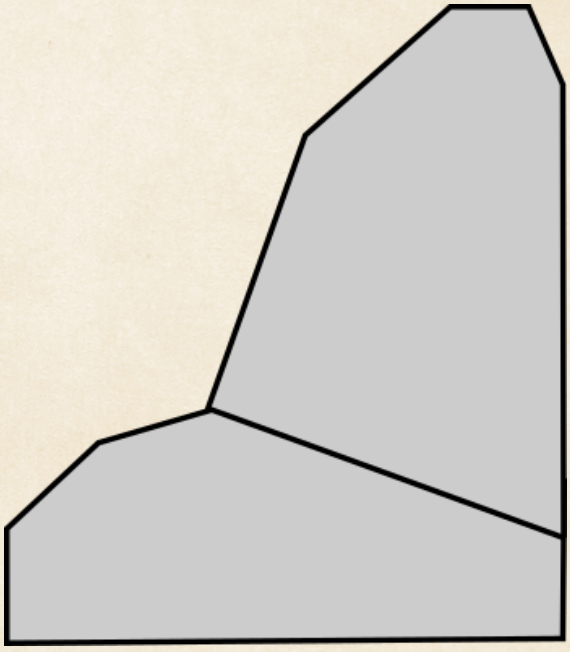
5. Shape the left part of the hill with two mountain folds.



6. Shape the right part of the hill with two mountain folds.

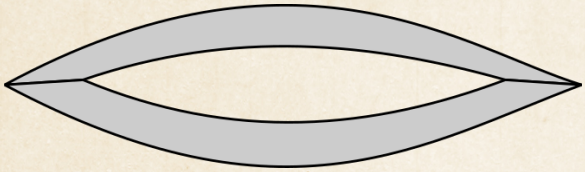


7. Shape the upper part of the hill.

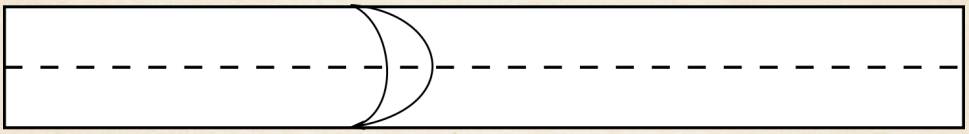


8. The final result.

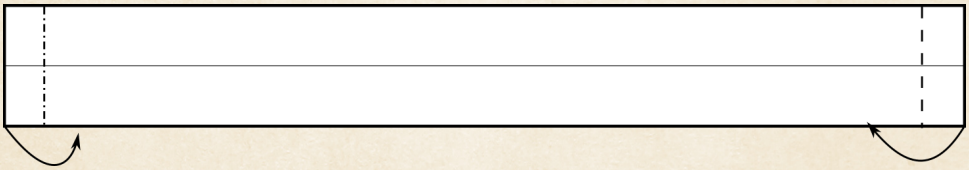
R - Mouth



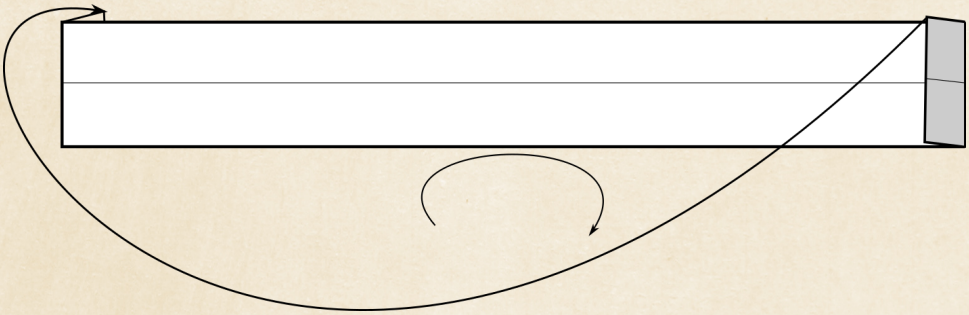
Mouth
Phonetic: r
Paper dimension: 1x8
Ratio: 0.5



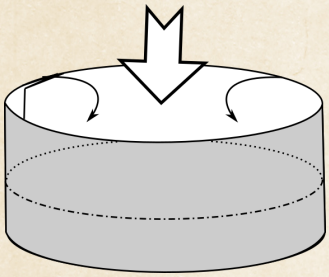
1. Fold and unfold the strip in half, mouth color on the back.



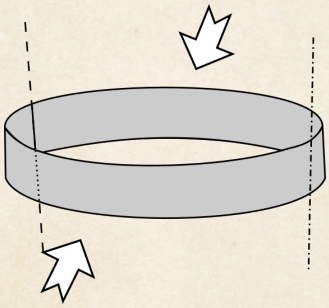
2. Mountain fold a small strip on the left, and valley fold it on the right.



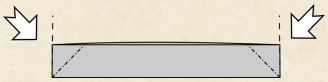
3. Lock the two strips together by overlaying them.



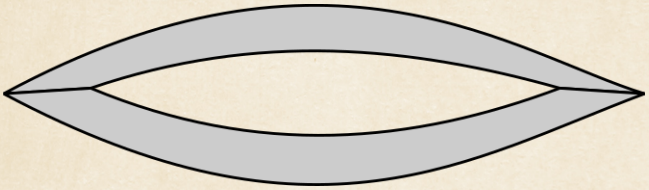
4. Fold the paper using the crease made step one. It will finalize the previously made lock.



5. Flatten the circle.

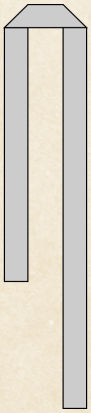


6. Do two crimps that will shape the mouth.

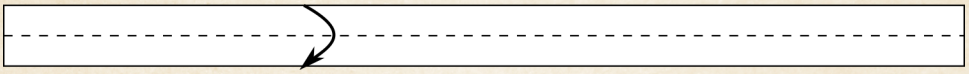


7. The final result after rearranging the curves.

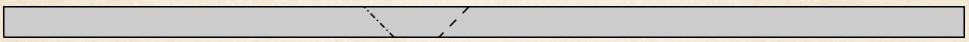
s - Folded cloth



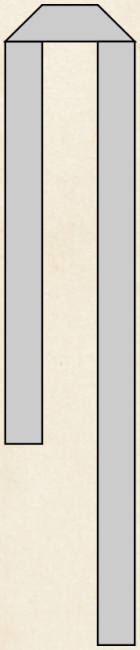
Folded Cloth
Phonetic: s
Paper dimension: 1x16
Ratio: 0.5



1. Fold the strip in half.

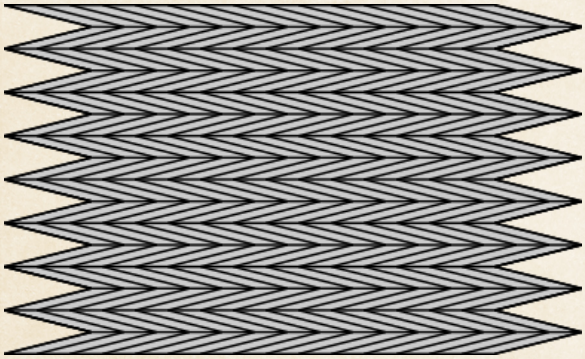


2. Fold twice to obtain the wanted result.



3. The wanted result.

∫- Pool

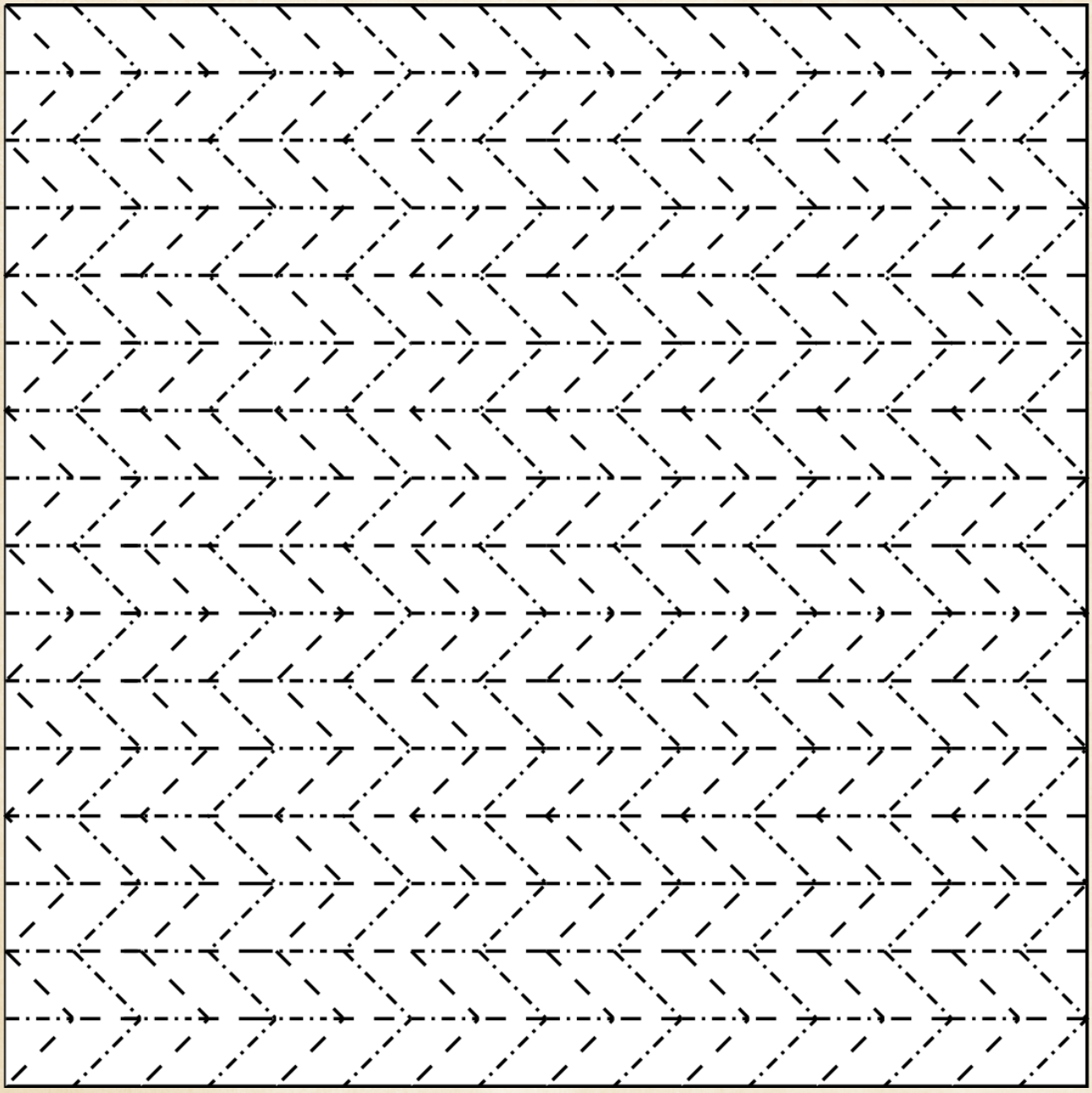


Pool

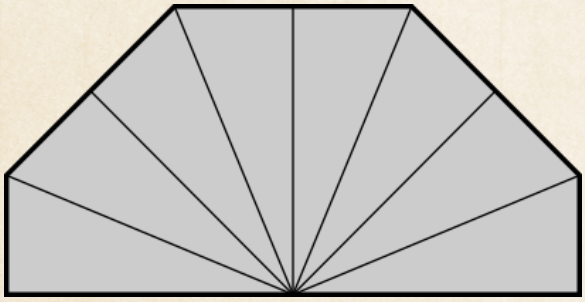
Phonetic: ∫

Paper dimension: 1x1

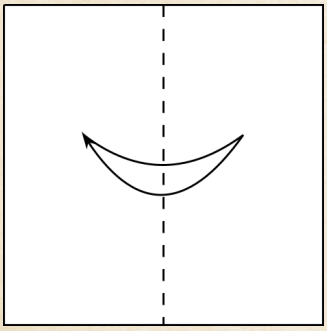
Ratio: 0.5



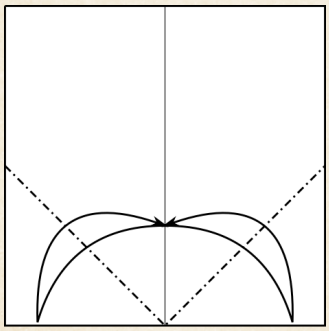
T - Loaf



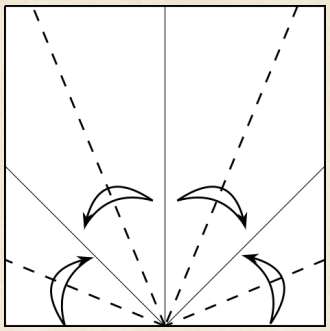
Loaf
Phonetic: t
Paper dimension: 1x1
Ratio: 1



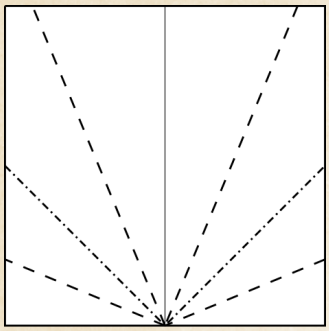
1. Fold in half. Unfold.



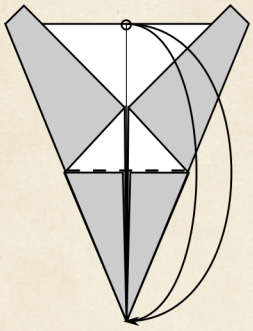
2. Mountain fold the angle bisector of the previous fold. Unfold.



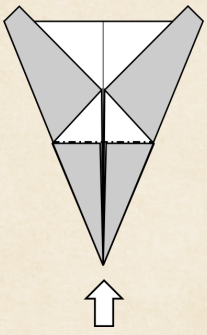
3. Valley fold the angle bisector of the previous fold. Unfold.



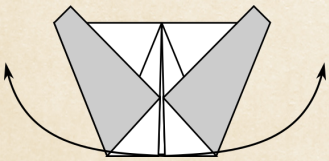
4. Pleat as shown.



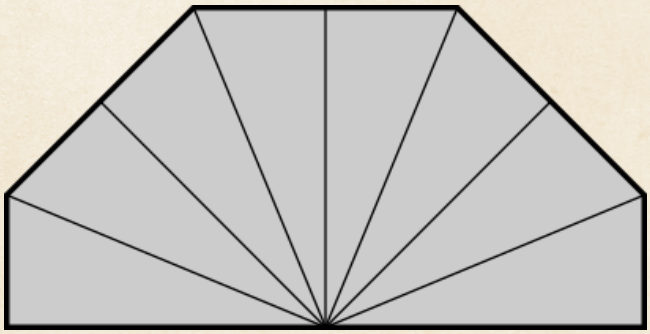
5. Fold firmly through all the layers using the reference point.



6. Open sink.

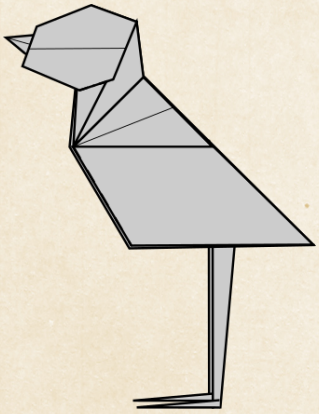


7. Open the previous sink, and flatten it.

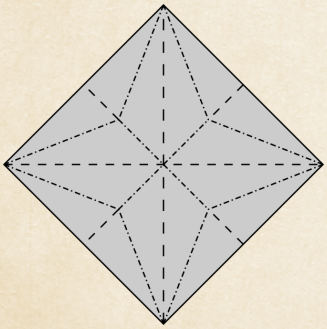


8. The final result.

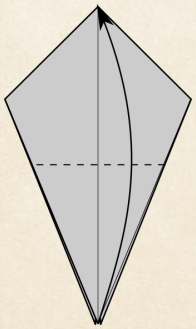
W - Quail Chick



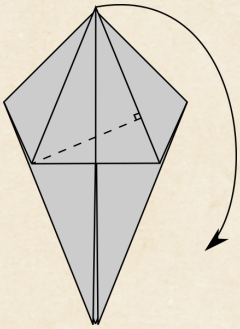
Quail Chick
Phonetic: w
Paper dimension: 1x1
Ratio: 0.3



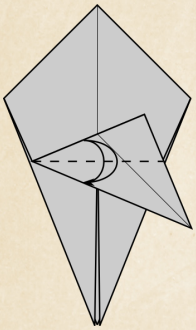
1. Fold a bird base your own way, all four points down.



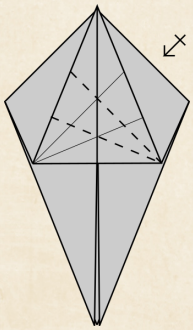
2. Fold the bottom point up.



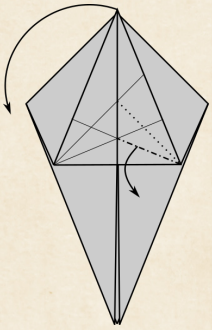
3. Fold the point down, lining it with the right edge.



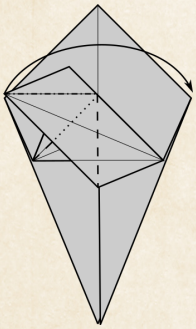
4. Fold and unfold an angle bisector. Unfold.



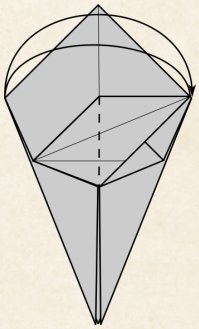
5. Repeat the two previous steps on the other side.



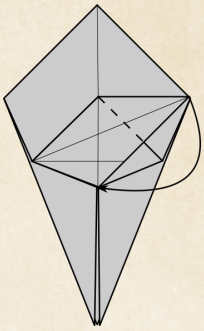
6. Swivel one layer down, bringing the point down, using the existing shown creases.



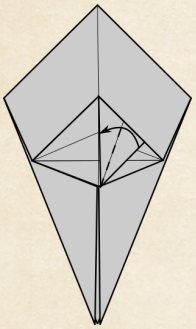
7. Fold the point on the right.



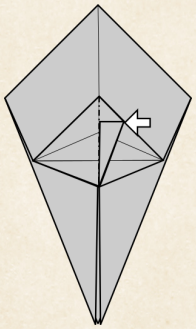
8. Fold and unfold the point.



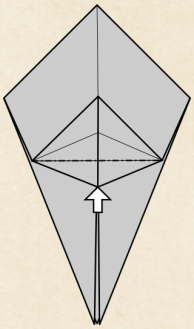
9. Fold the point down.



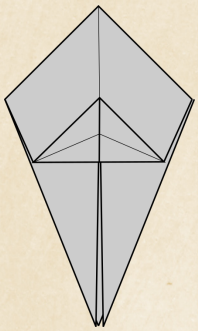
10. Fold an angle bisector to lock the layers.



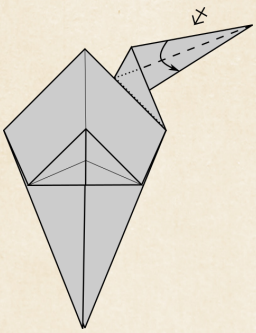
11. Closed sink the big layer.



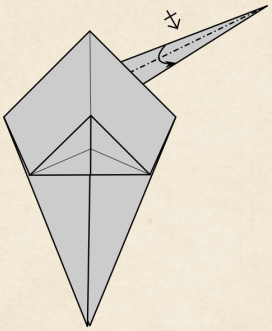
12. Close sink the two bottom layers.



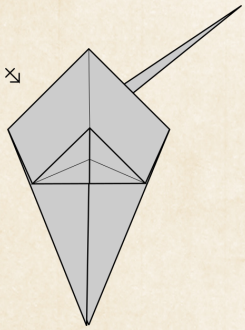
13. Swivel the bottom right point as shown next step.



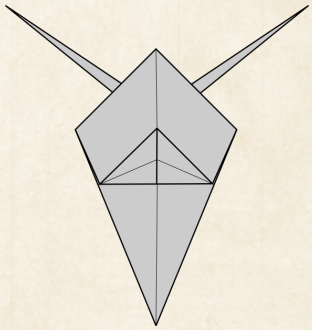
14. Swivel fold to thinner the point in half. Repeat behind.



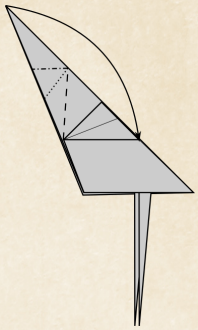
15. Fold the point in half. Repeat behind.



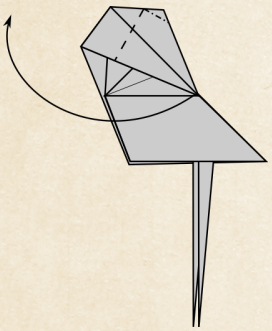
16. Repeat steps 12 to 14 on the other side.



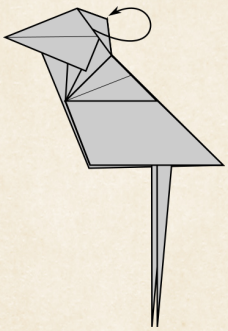
17. The expected result. Fold the model in half.



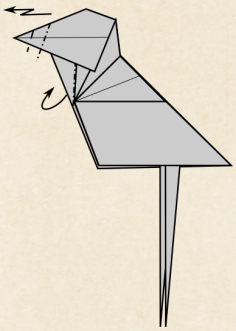
18. Squash the top point as shown.



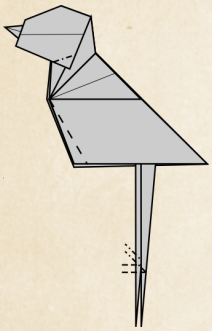
19. Fold the point on the left, adding a pleat fold.



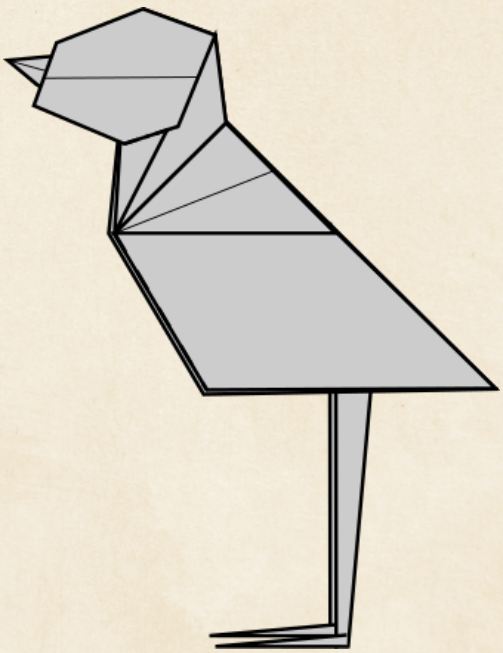
20. Wrap the layer to hide it.



21. Pleat to create the beak. Thinner the chest.

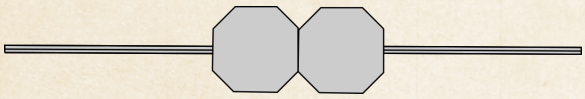


22. Thinner the belly and pleat the legs.

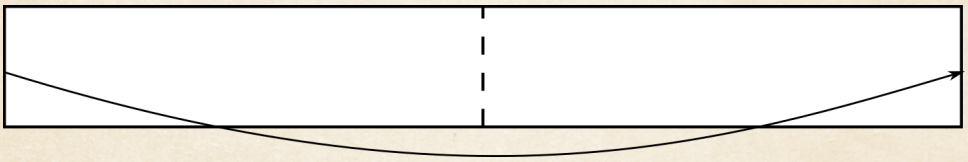


23. The final result.

Z - Door Bolt



Door Bolt
Phonetic: z
Paper dimension: 1x8
Ratio: 0.9

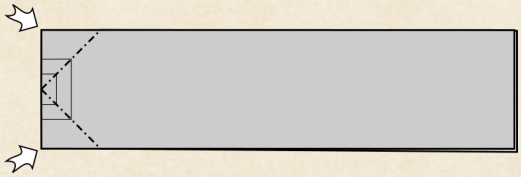


1. Fold the strip in half.

2. Fold the two corners to the middle.

3. Divide the resulting triangle in half.

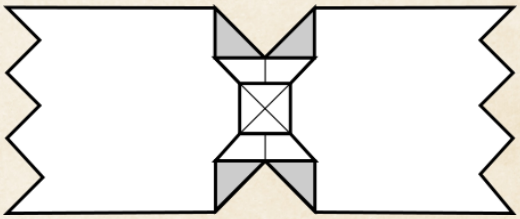
4. And divide in fourth. Unfold to step 2.



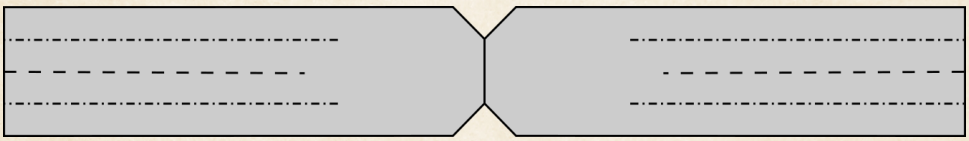
5. Inside reverse fold the two corners.

6. Open sink in and out the point.

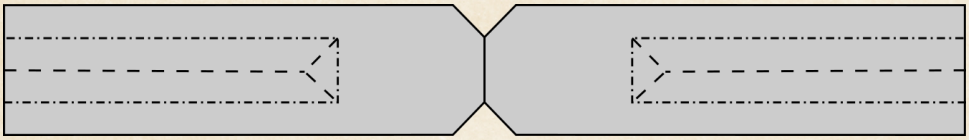
7. Turn the top layer to the left. The sinked point will be squashed. The result on the back is shown next step.



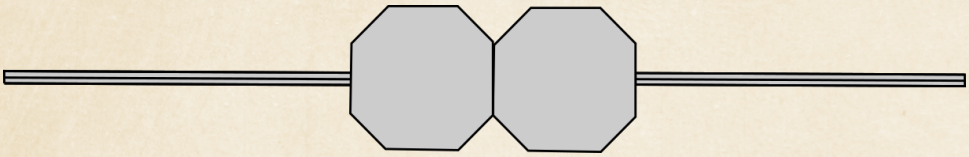
8. The wanted result on the back.



9. Fold part of the paper in fourth as shown. Try no to fold the center part of the model.



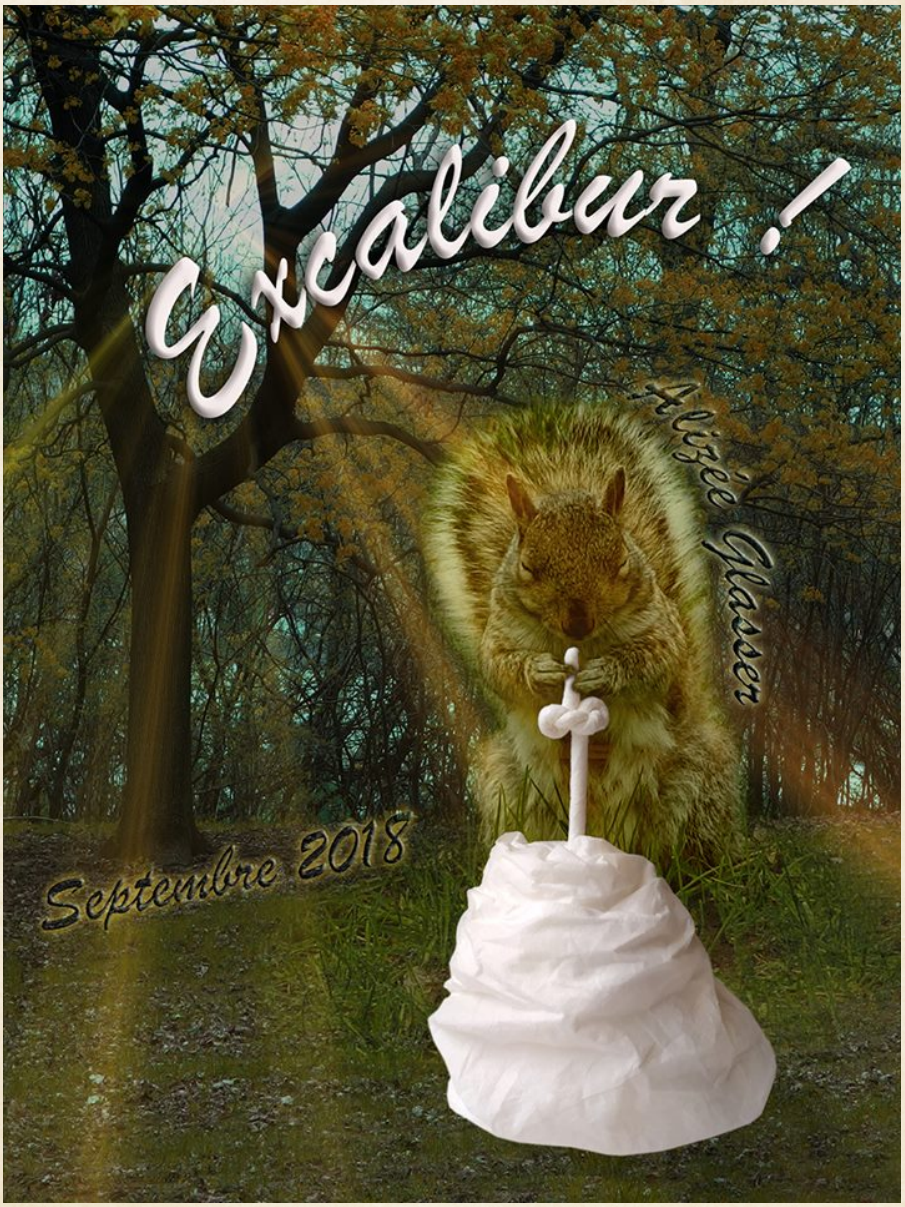
10. Pinch to tips to fold as shown. The model won't lie flat anymore. Try to shape the two center parts to look like circles as shown next step.



11. The final result.

Part IV

Designs from the challenge



Alizée Glasser

Eric Vigier

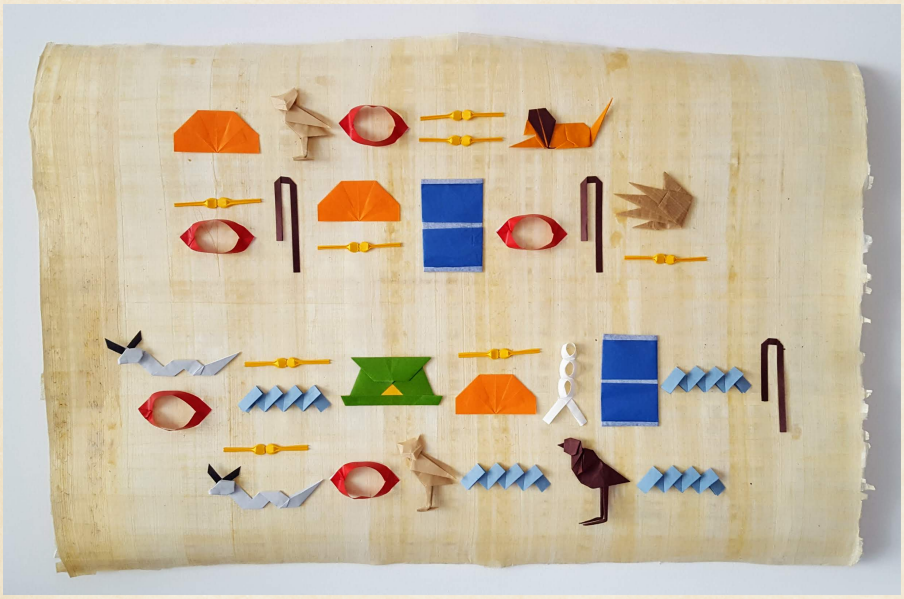
Fred Sab.

Daniel Bermejo Sánchez.

João Charrua.

Roman Diaz.

Victor Manuel Nuñez Riaguas.



As for myself, I created this hieroglyphic mural

Part V

Internet Links

Here are the links to the other folders of the challenge, please check out their amazing galleries!

- **Alizée Glasser**: https://www.flickr.com/photos/103744058@N08/
- **Eric Vigier**: http://www.leplieurfou.sitew.fr
- **Fred Sab**: http://www.le-six.fr
- **Daniel Bermejo Sánchez**: https://www.flickr.com/photos/142703900@N05/
- **João Charrua**: https://www.flickr.com/photos/joao_charrua/
- **Roman Diaz**: https://www.flickr.com/photos/88586913@N00/
- **Victor Manuel Nuñez Riaguas**: https://www.facebook.com/victormanuel.nunezriaguas

And below are the Instagram pages of my city's origami group, and mine.

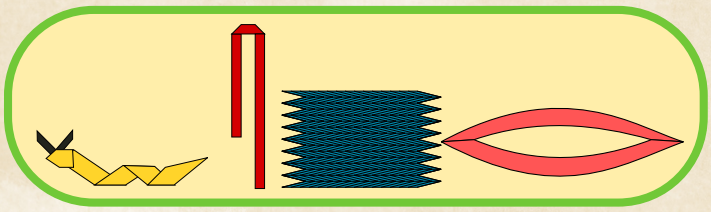
- **Soupetard/Toulouse**: origami_tls on instagram
- **Vincent Achard**: vincentachard on Instagram

Part VI

Acknowledgments

First of all, I would like to thank all the participants of the challenge. Thank your patience. I know I haven't been the fastest folder out of the group, but I did my best to be in time. And congratulation to all of you for creating such models! It's been a pleasure to be part of this Joust.

My thanks also go to my dear friends that helped me all along those three weeks. Zapryanka for the idea, Yvette for spending way more time than she should have on the book template, Océane, Nathan and Anaël for proofreading the book and Thomas for keeping me motivated and focused all this time. And to all the other folks of Racl7: thanks for the support!

A special thanks goes to the origami club Soupetard/Toulouse (Jong-Mo, Zapryanka, Laurence, Llewellyn, Viviane, Maëlle, Cathie, Eugénie, Benoit, Yannick, Inès, Nadège, Robert, Claudine, Pierre, Frédérique, Andrés, Clémence). You really helped me correct the diagrams, and not making a mess out of this book. I am really grateful for the time you took to listen to all of my aborted ideas these last four years. Let's try to materialize more of them!

And last but not least, I'd like to thank my Grandma for introducing me to origami more than 10 years ago. Everything is thanks to you!