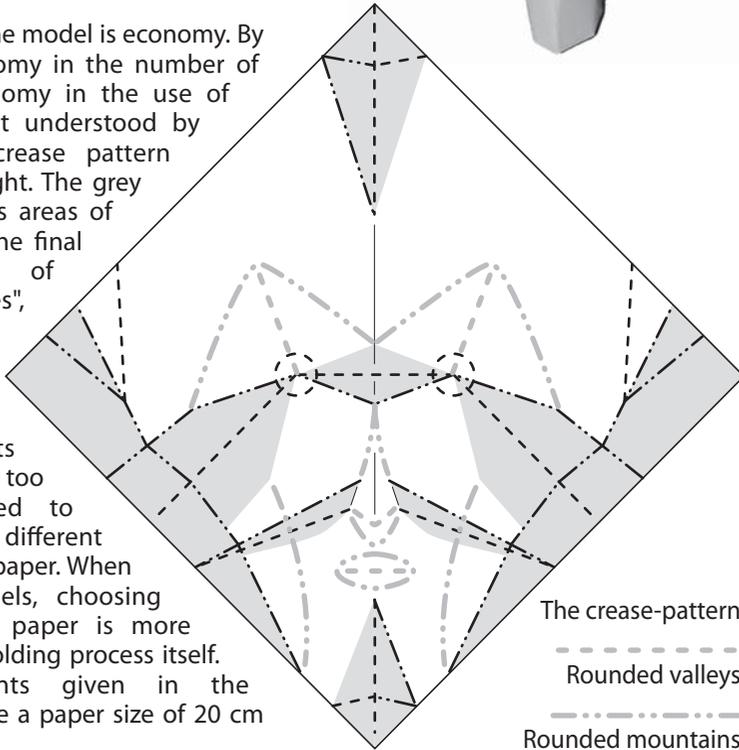
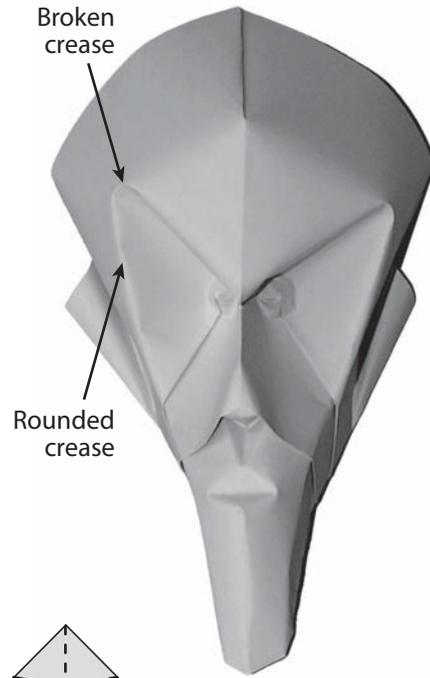


3D MASK

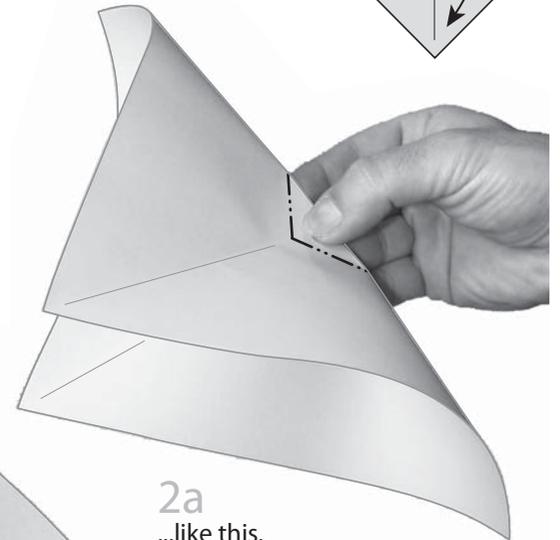
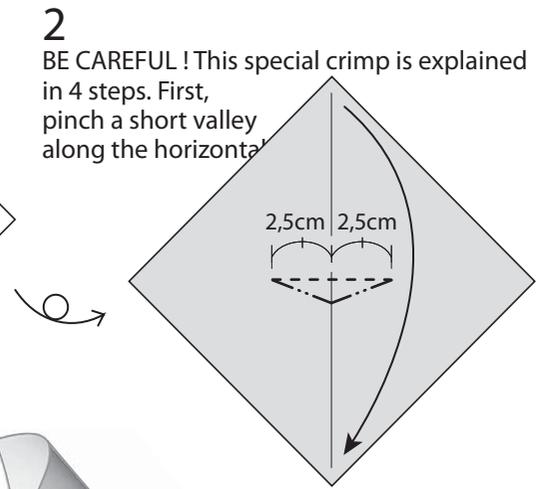
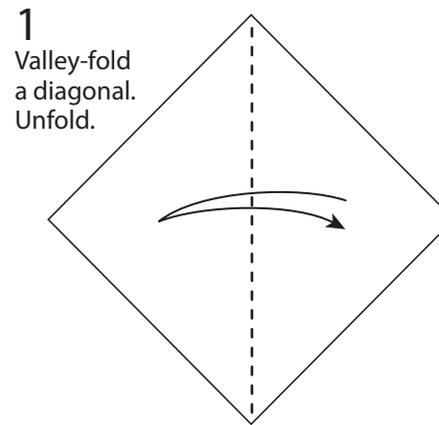
© Eric Joisel 1999.
 Unauthorised reproduction is forbidden.

It is difficult to draw diagrams for 3-D models, and difficult to understand such diagrams. So, this is my first attempt to diagram with a digital camera — it may be an unfamiliar method, but I hope you will appreciate seeing the hand positions and shadows. **BE CAREFUL !** There are 40 photos, only 16 of which show "real" steps, as in a conventional set of diagrams. These steps are indicated by a **BLACK** number. The other 24 steps are "intermediary" steps, indicated by a **GREY** number AND a letter.

The basic idea of the model is economy. By this, I mean economy in the number of creases, and economy in the use of paper. This is best understood by looking at the crease pattern diagram on the right. The grey shading represents areas of paper hidden in the final model. The use of "rounded creases", "broken creases" and "tensioning" of the paper, means that your first attempts probably won't be too perfect. You need to practice, testing different types and sizes of paper. When making 3-D models, choosing exactly the right paper is more difficult than the folding process itself. The measurements given in the instructions assume a paper size of 20 cm (8 inches) square.



2

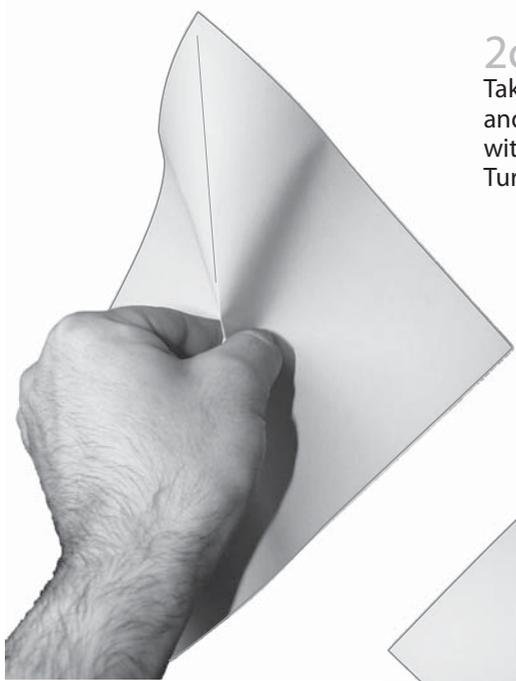


2a
 ...like this.
 Hold the paper about 1 cm (1/2in) in from the edge

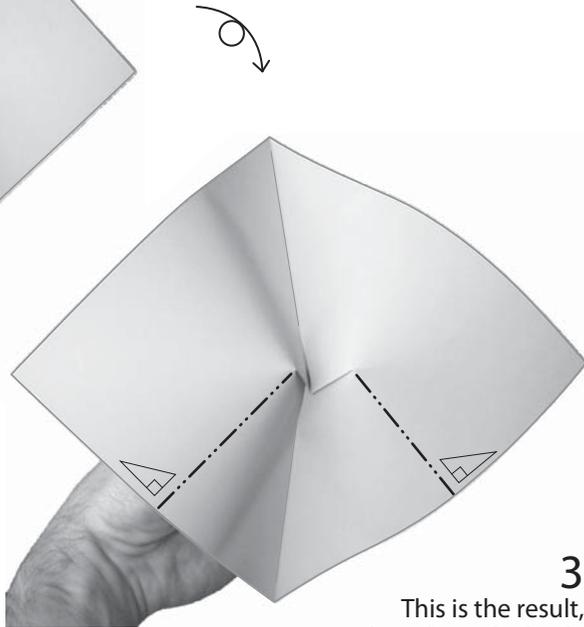


2b
 To make the crimp easily, put your left hand thumb and first finger on the ends of the short crease, then on the inside, press down with your right hand thumb,

3



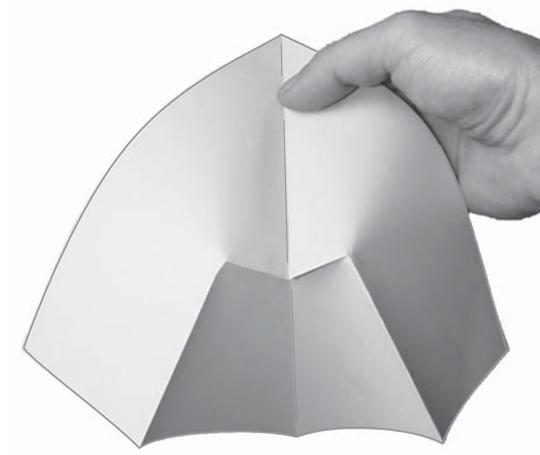
2c
Take out your right thumb and flatten the crimp firmly with your left hand.
Turn over.



3
This is the result, seen here from the back.
Make 2 mountain folds that start from the ends of the crimp,

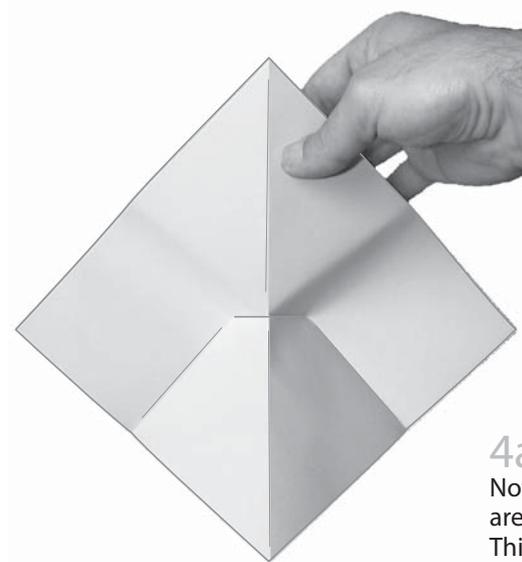
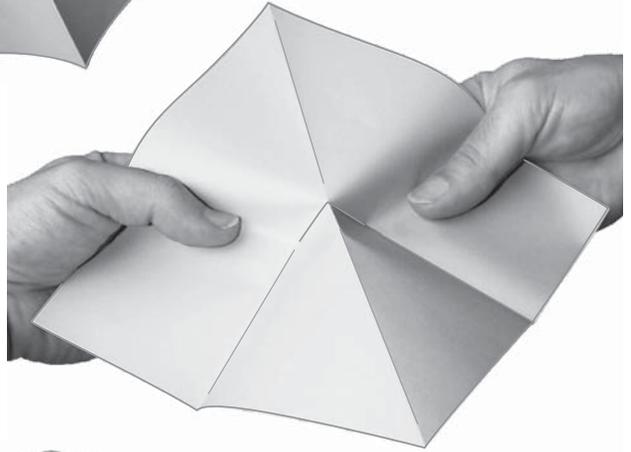


3a
...like this.

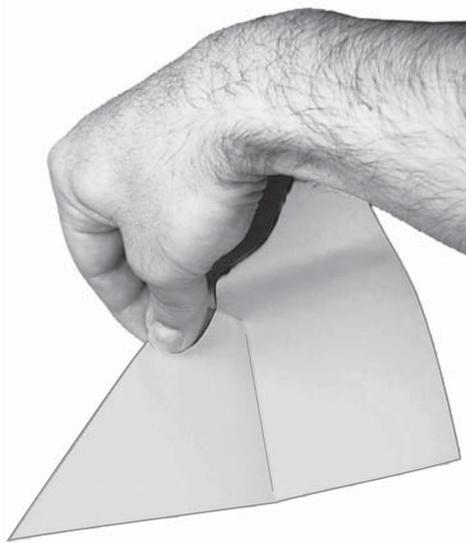


3b
This is the result.
Turn over.

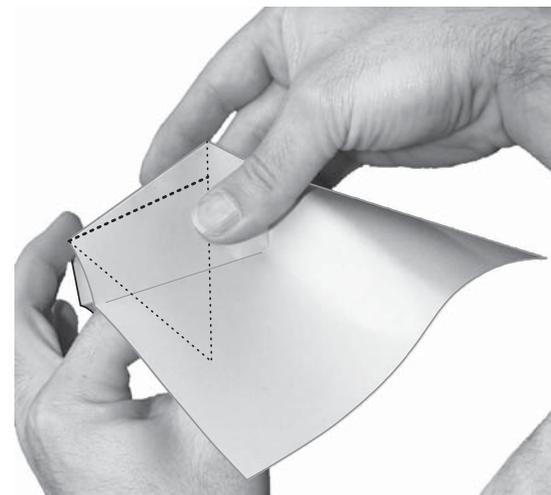
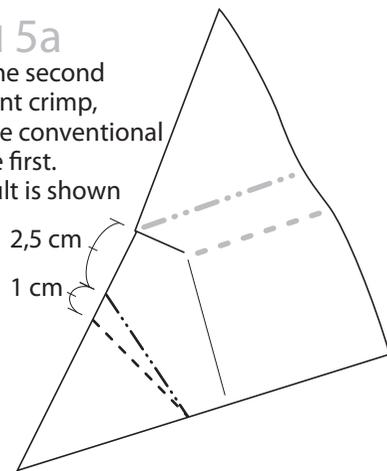
4
Make rounded "mountains" and "valleys" as shown.
Use your thumbs on the front to create the valleys, and first fingers behind



4a
Note that the rounded mountains are not exactly perpendicular to the edges.
This form already suggests a mask,

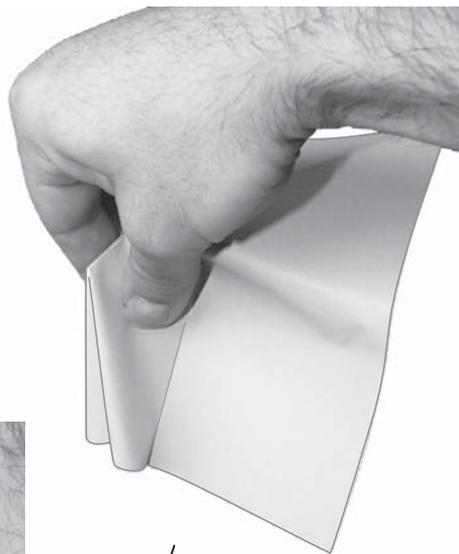


5 and 5a
This is the second important crimp, but more conventional than the first. The result is shown

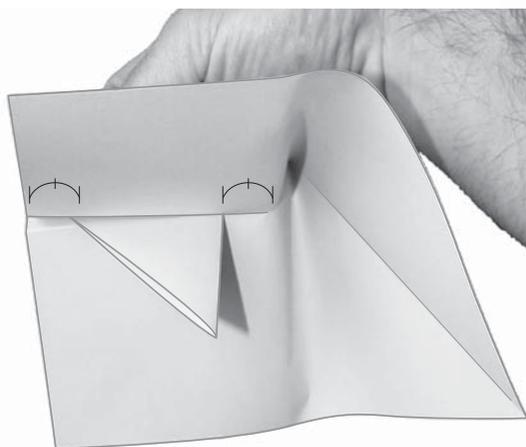
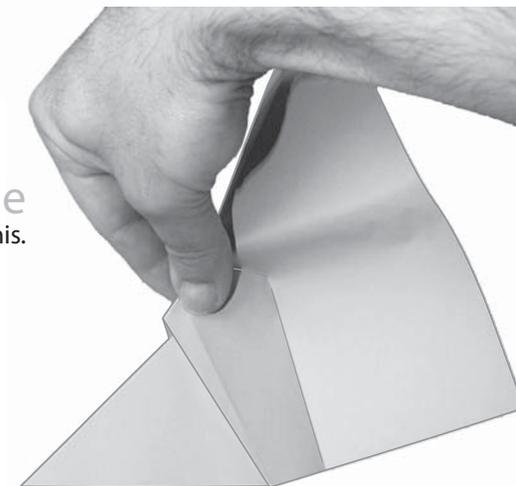


5d
Before completing the crimp with another inside reverse fold, make sure you leave 1cm (1/2in) of paper inside the nose...

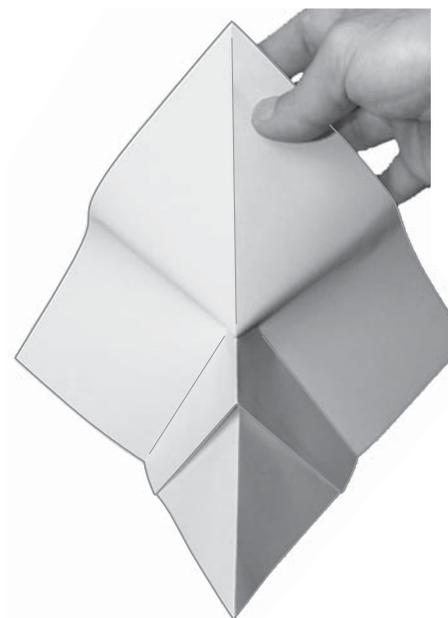
5b
Before you flatten this inside reverse fold, look at step 5c.



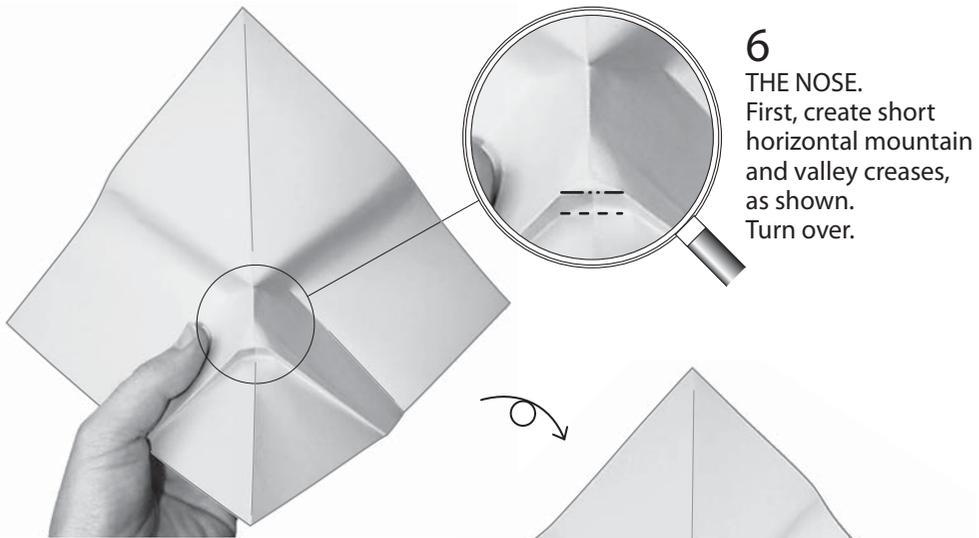
5e
...like this.



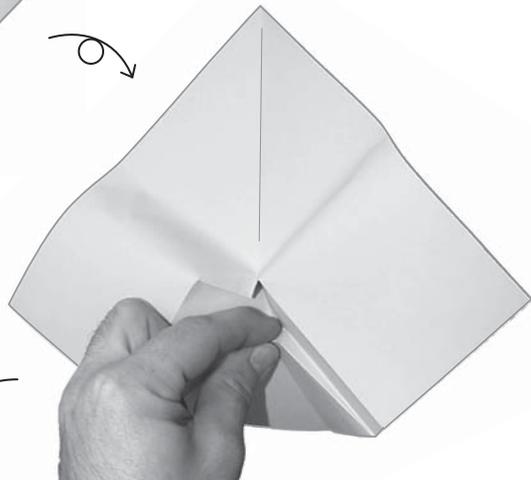
5c
INSIDE VIEW. Adjust the position of the flat triangle so that it is centrally placed between the mountain creases,



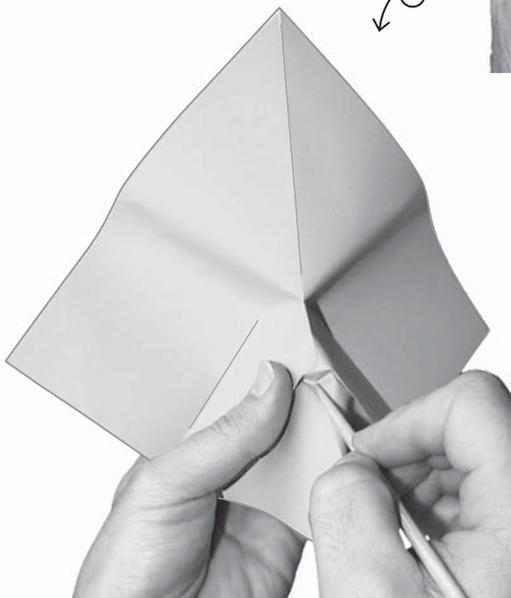
5f
With just 5 folds (1 diagonal, 2 crimps, and 2 valleys in the cheeks), you have already created a mask. From here onwards, I'm sure you can create your own variations...
... or go to step 6.



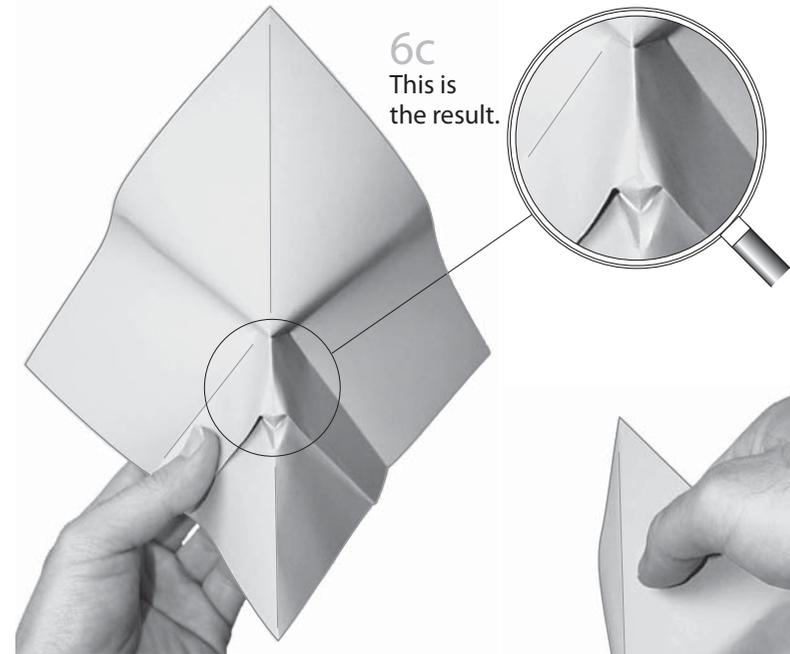
6
THE NOSE.
 First, create short horizontal mountain and valley creases, as shown. Turn over.



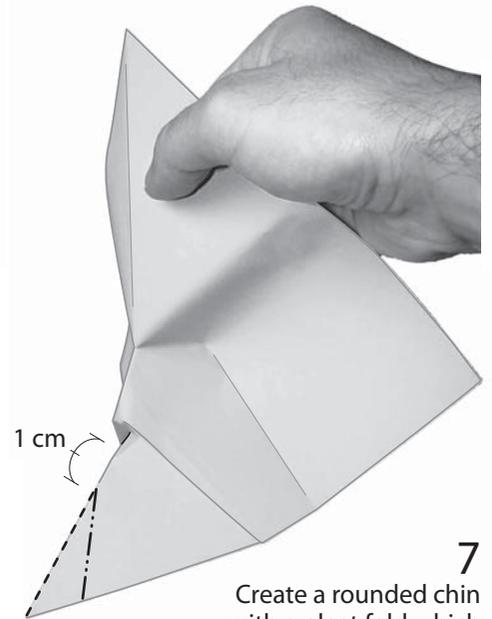
6a
 Place your first finger against the inside of the nose.



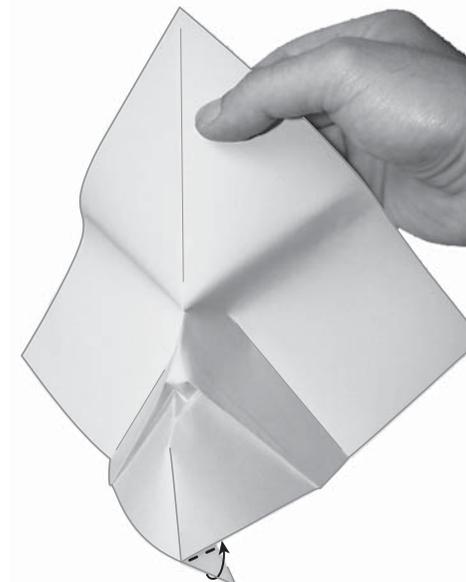
6b
 The special secret weapon is a MASK MACHINE (please, don't tell anyone about it!). It's a very sophisticated chop-stick, or something similar. Simultaneously push down with the stick on the front, and inside with your first finger. This creates the two nostrils and the crimp in the upper lip.



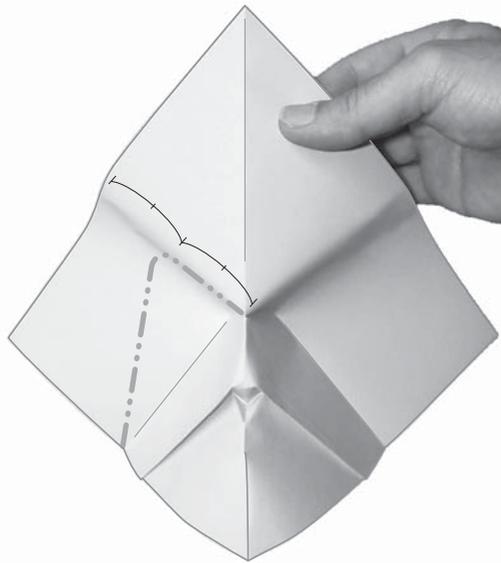
6c
 This is the result.



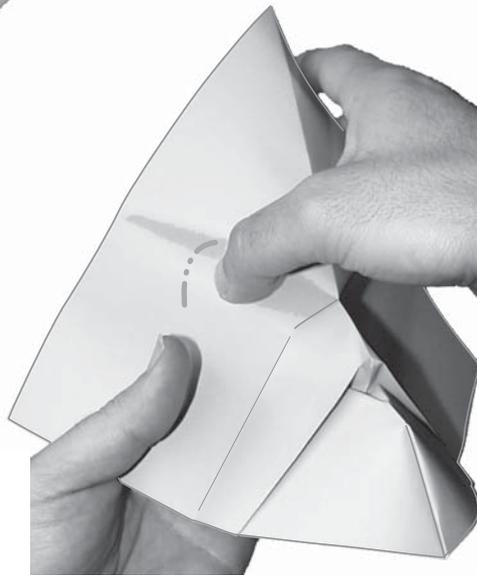
7
 Create a rounded chin with a pleat fold which begin about 1 cm (1/2in) below the mouth.



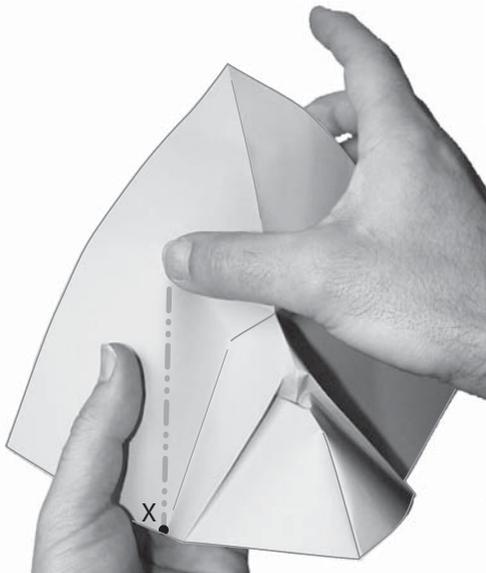
8
 Tuck the corner right inside, as far as the centre line.



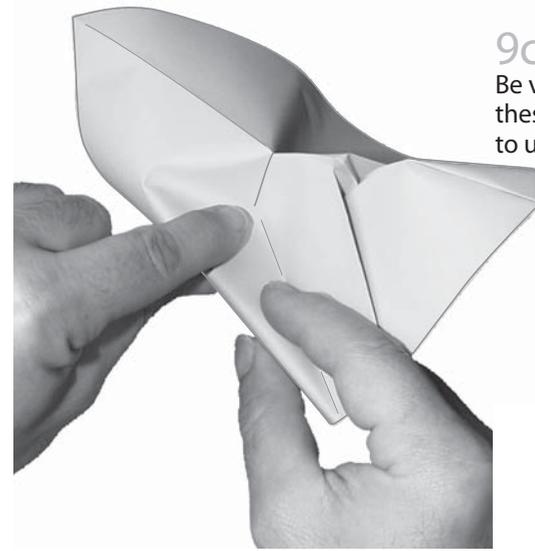
9
To finish the brow, we need to create both "broken" and "rounded" creases. The broken crease is in the middle of the rounded crease already made. The result can be seen in step 10.



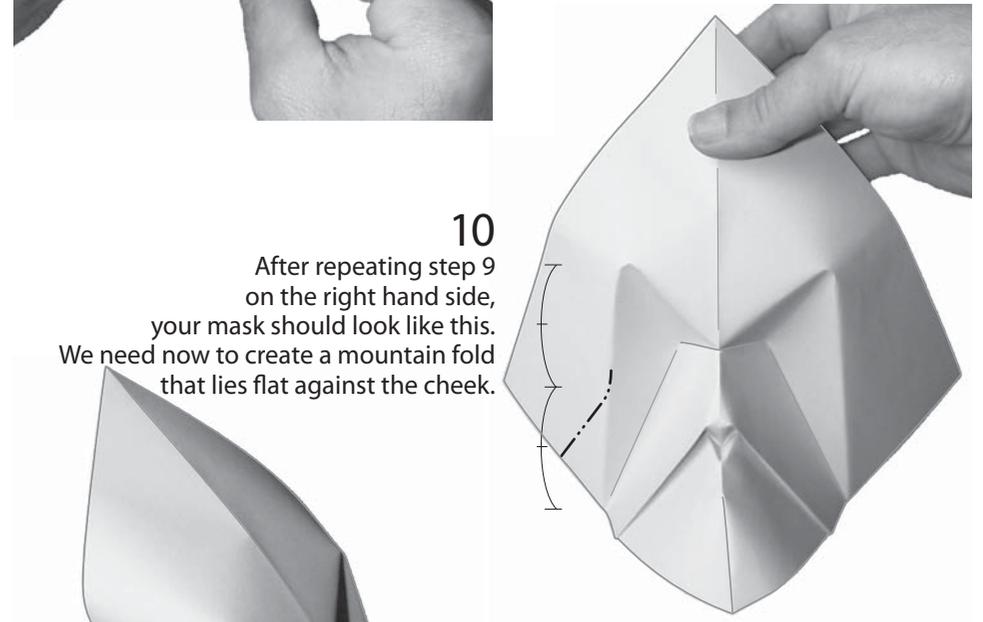
9a
BROKEN CREASE.
Hold your right thumb as shown, and push forward from the back



9b
Then, create a **ROUNDED** mountain, that begins at the end of the broken crease and ends at point X.



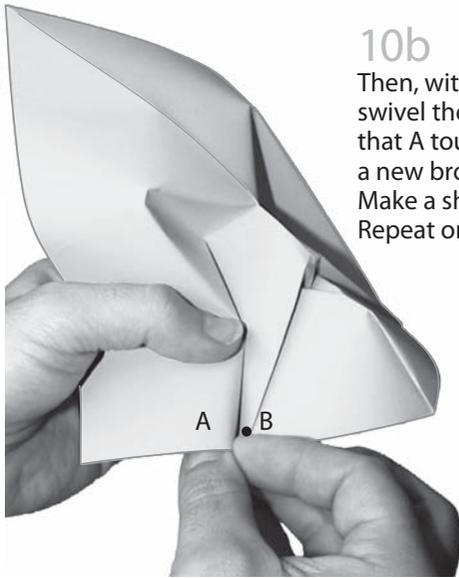
9c
Be very careful when rounding these mountains ! It is not possible to undo a mistake (what stress !).



10
After repeating step 9 on the right hand side, your mask should look like this. We need now to create a mountain fold that lies flat against the cheek.

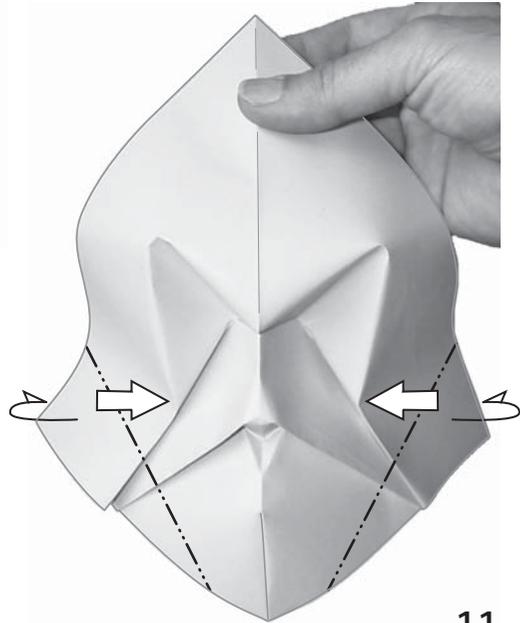


10a
First, with your left thumb, press the middle of the rounded mountain made before, so that it touches the cheek.



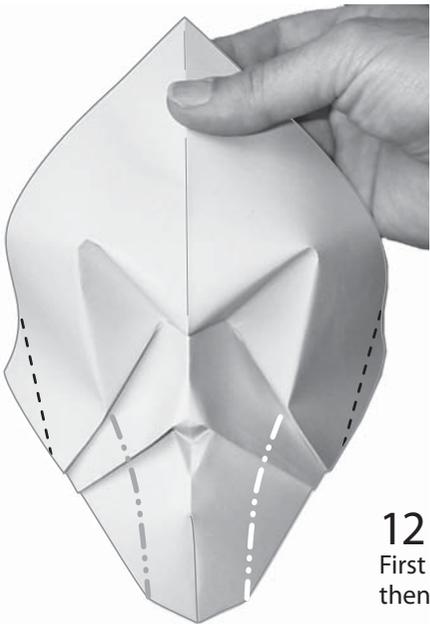
10b

Then, without moving your left thumb, swivel the pleat at the edge of the paper so that A touches B. This will create a new broken crease under your left thumb. Make a sharp crease. Repeat on the right.



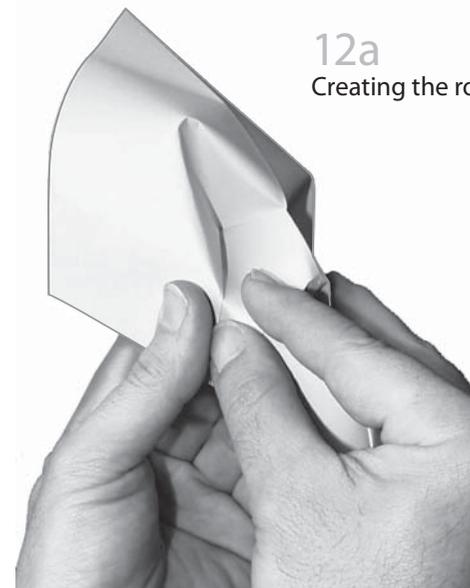
11

These 2 new broken creases create tensions that press the cheek layers together. Narrow the mask by folding the left and right corners behind, as shown.



12

First create rounded mountains (step 12a), then create ears by making valleys (step 12b).



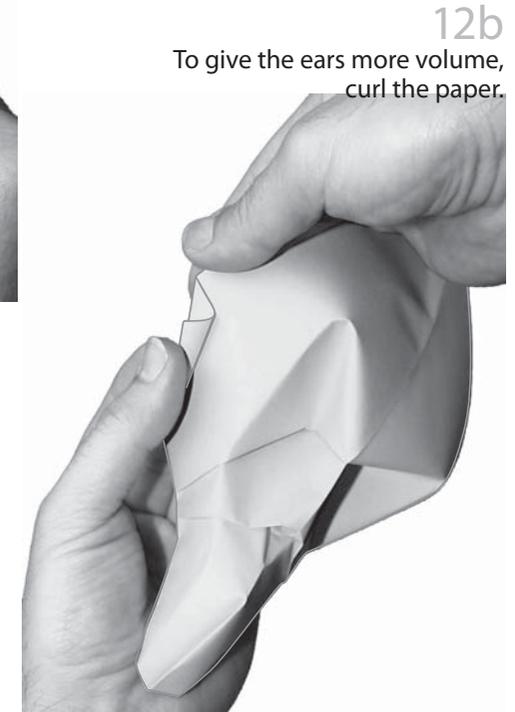
12a

Creating the rounded mountain.



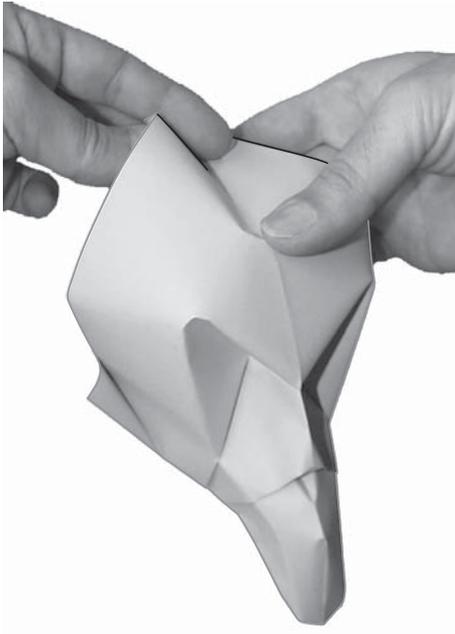
13

This is the result. To create the forehead, make the same kind of pleat



12b

To give the ears more volume, curl the paper.



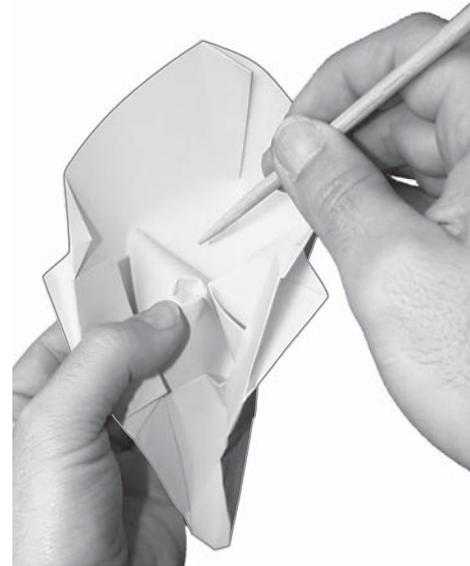
13a
The pleat in progress.



14
Make the same lock as for the chin, tucking the corner right inside to the centre line.



15
INSIDE VUE.
The eyes are made by sinking corner C. To make the sink easier, hold layers D and E together in your left hand. If you want 2 eyes, repeat on the right.



15a and 15b
To finish details such as the eyes, mouth and broken creases, the wonderful MASK MACHINE



16
The mask completed.
The first few times that you make this model, you'll try to make it symmetrically, as though proving to yourself that you can control the paper. But in fact, a symmetrical mask looks "dead". So, practise, and enjoy...

Tested during 31.12.1999, by Claudine, Giusepina, Patricia, Ulla and Thoki.
Great thanks to them, and a special one to Paul for his translation.