

Piranha

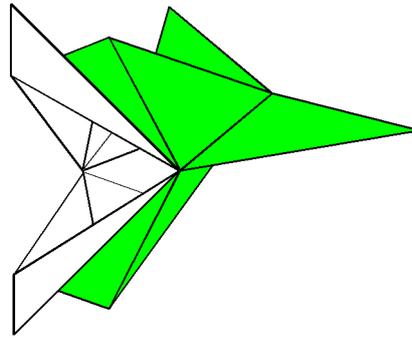
Designed by David Mitchell

Piranha is an active play paperfold. Manipulating the fins will open and close the mouth in a quite dramatic fashion.

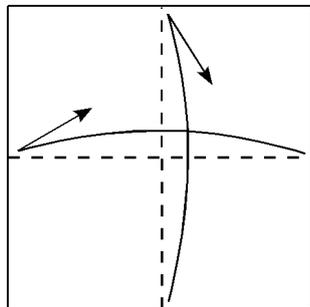
The design is a simple adaptation of a traditional Windmill base.

I designed Piranha in 1993.

You can make Piranha from a single square of any kind of paper. If you are using irogami begin with your paper arranged white side up.

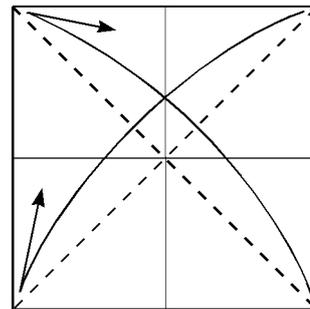


1



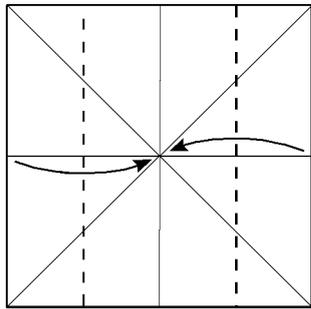
1. Fold in half edge to edge, then unfold, in both directions.

2



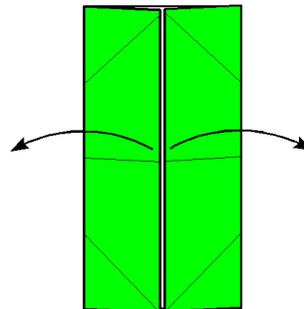
2. Fold in half diagonally, then unfold, in both directions.

3



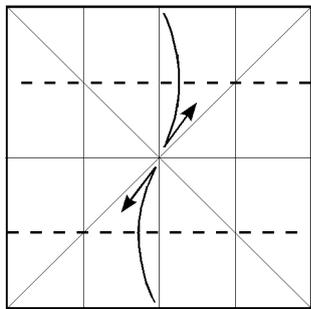
3. Fold both the left and right hand edges into the centre.

4



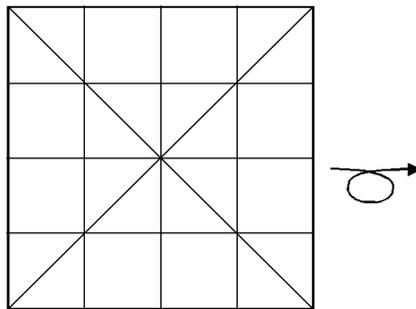
4. Open out the folds made in step 5.

5



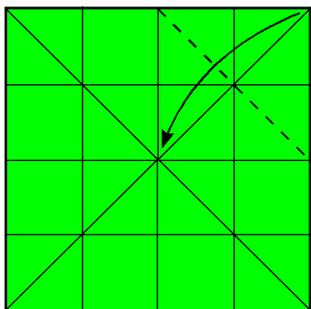
5. Fold the top and bottom edges into the centre, crease, then unfold.

6



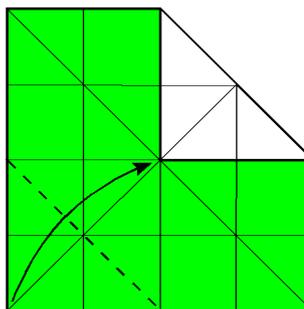
6. This is the result. Turn over sideways.

7



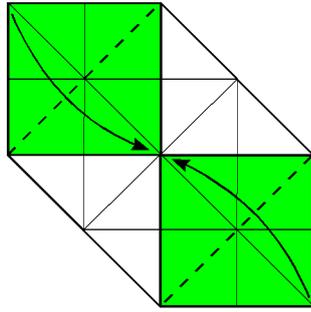
7. Fold one corner into the centre.

8



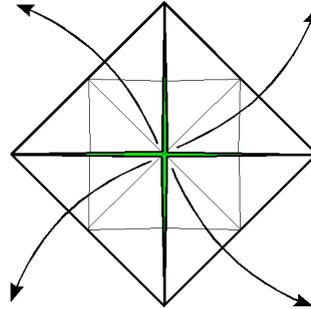
8. Fold the opposite corner into the centre as well.

9



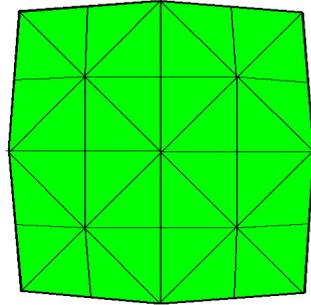
9. Fold the other two corners into the centre as well.

10



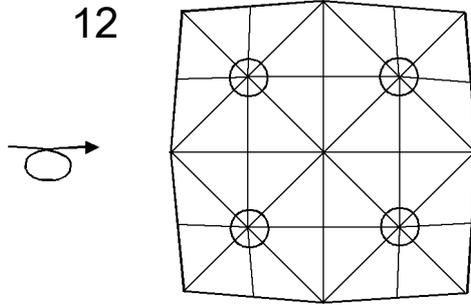
10. Open out the folds made in steps 9 through 11. Try to avoid flattening the creases as you do this.

11



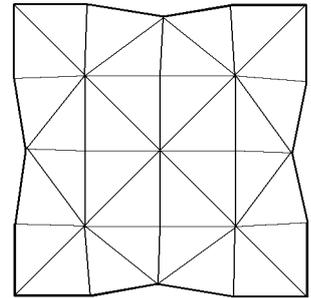
11. This is the result. Turn over sideways.

12



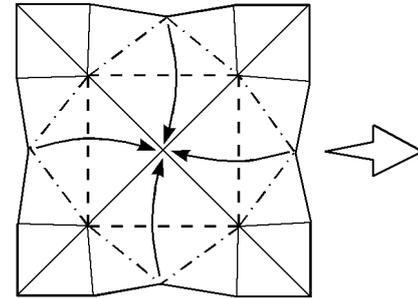
12. When you first turn the paper over the four corners will be pointing slightly backwards. Flip each corner forwards in turn so that the intersections identified by circles become slightly concave.

13



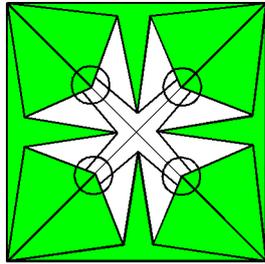
13. The result is a form like a shallow dish.

14



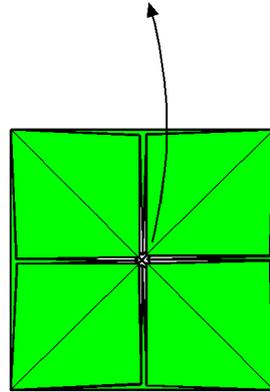
14. Fold the middle of each edge into the centre of the dish. The next picture is on a larger scale.

15



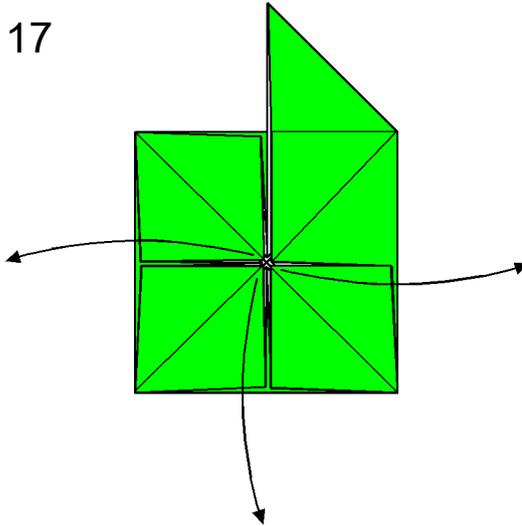
15. Flatten the folds completely so that all the points marked with circles end up in the centre.

16



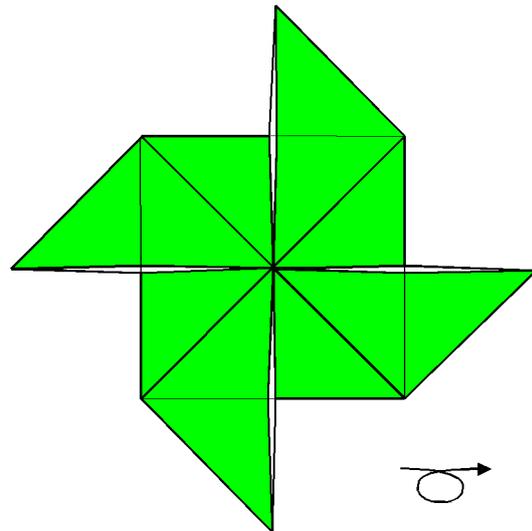
16. Open out one flap like this.

17

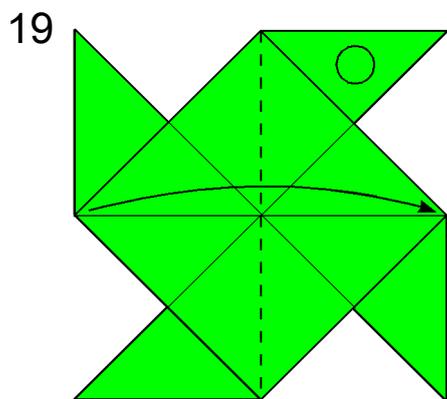


17. Open out the other three arms in a similar way.

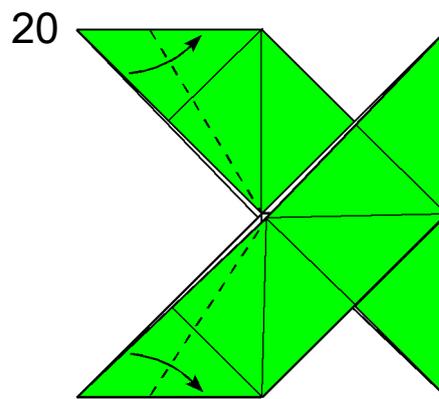
18



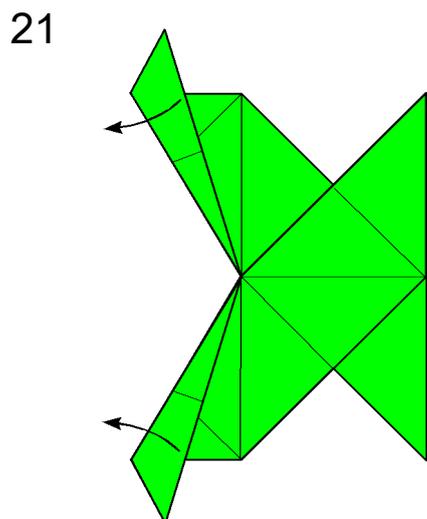
18. This is the traditional design known as the Windmill. Turn over sideways and rotate to align with picture 19.



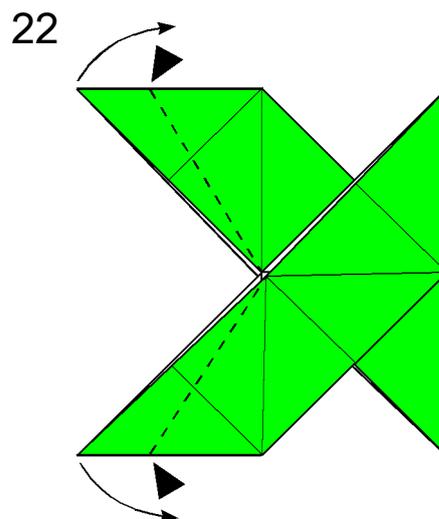
19. Pick the paper up and fold the top layers in half from left to right. Allow the flap marked with a circle to swing across to the left behind as you do this.



20. Fold the sloping left hand edges of the mouth across to the right as shown. There are no location points for these folds. Try to ensure the top and bottom of the mouth remain as symmetrical as possible.

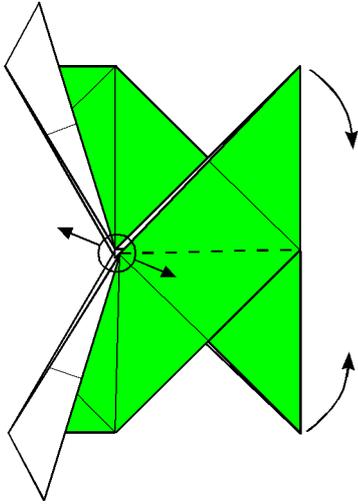


21. Open out the folds made in step 20.



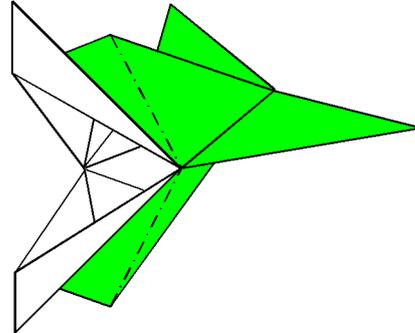
22. Outside reverse fold both flaps, using the creases made in step 20, to form the mouth.

23



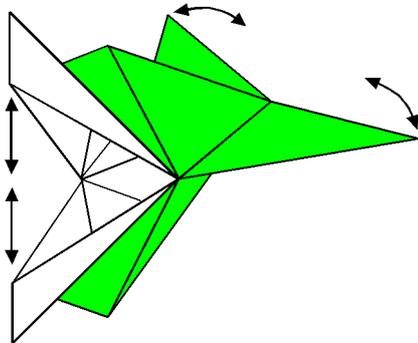
23. Take one of the tail-fins in each hand, rotate them so that they are at right angles to the body then ease the front of them gently apart so that the mouth opens. The result should look like picture 24.

24



24. As you do this the flap inside the mouth should swing to one side or the other. You will also need to remake the four creases around the mouth as mountainfolds to reinforce the shape.

25



25. Piranha is finished. By holding the tail-fins and gently moving the tips slightly together and apart you can make the mouth open and close quite dramatically.

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