

Pentangle

Designed by David Mitchell

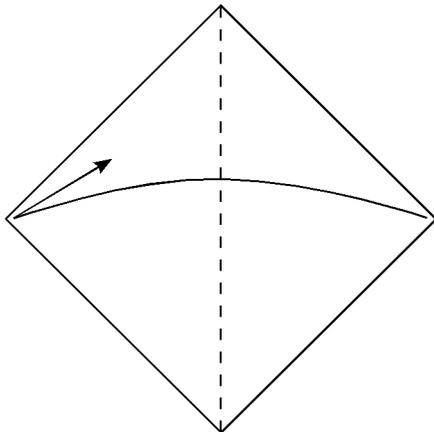
Pentangle is one of my earliest modular designs, dating from 1989. It was unusual at the time because of its use of mock platinum folding geometry.

This design holds together because of the friction generated by the mutual pressure the modules exert on each other at the centre of the star. The diagrams show you how to fold the star from 15cm squares of irogami, which must first be blintzed to halve their area and double their thickness. You could avoid the need for this by using small squares of matt finish paper instead.



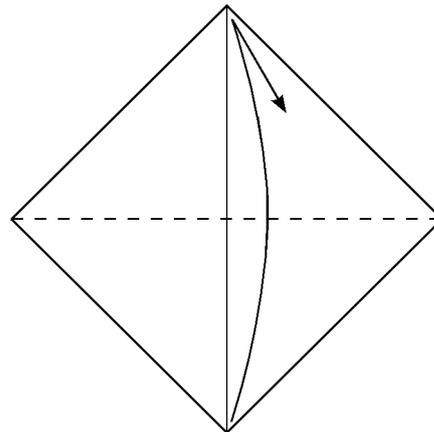
You will need five squares of paper in contrasting but complementary colours. If you are using irogami begin with your paper arranged white side up.

1



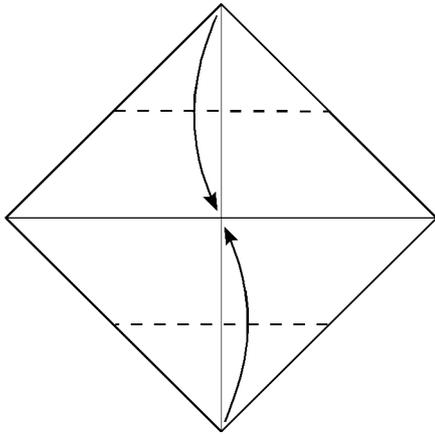
1. Fold in half sideways, then unfold.

2



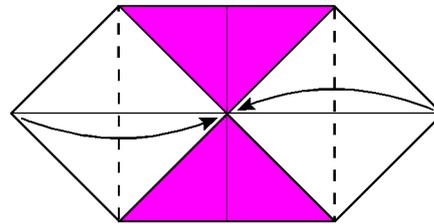
2. Fold in half upwards, then unfold.

3



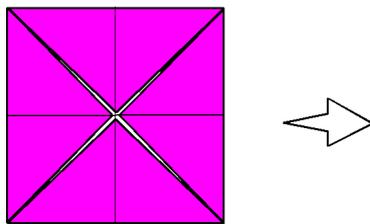
3. Fold the top and bottom corners into the centre.

4



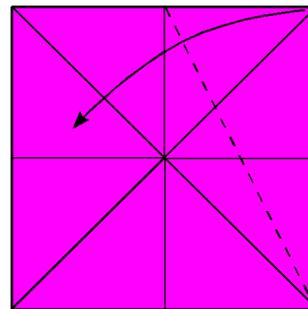
4. Fold the right and left corners into the centre.

5



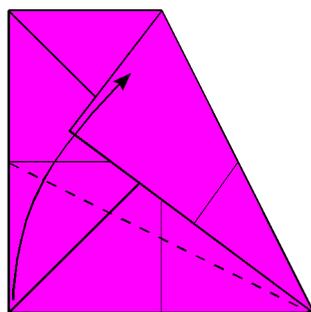
5. This is the result. The next picture is the same but on a larger scale.

6



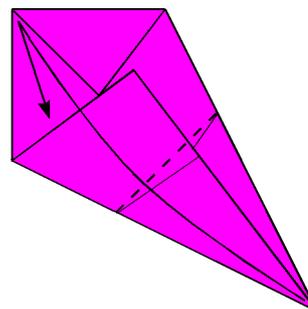
6. Fold the top right corner inwards making sure the crease starts from the centre of the top edge and that the bottom right corner remains sharp.

7



7. Fold the bottom left corner inwards making sure that the crease starts from the centre of the left edge and that the bottom right corner remains sharp.

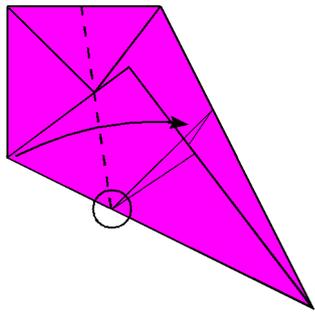
8



8. Fold in half diagonally as shown, then unfold.

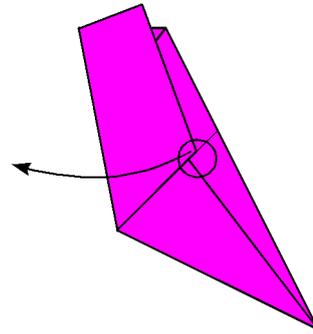
2

9



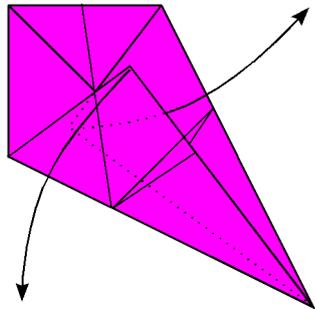
9. Fold the top section of the sloping bottom edge onto the crease made in step 8.

10



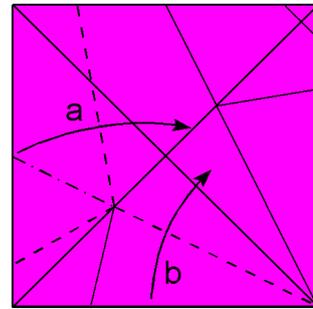
10. Unfold.

11



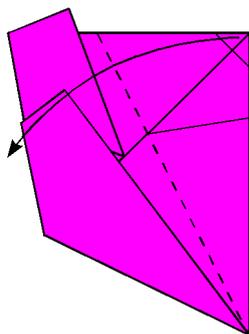
11. Undo the folds made in steps 6 and 7.

12



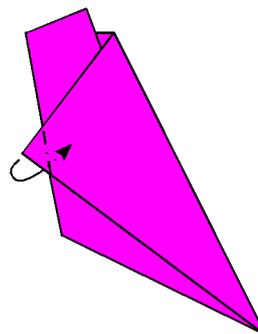
12. Make fold a then fold b to collapse the paper into the form shown in picture 13. You do not need to make any new creases to do this.

13



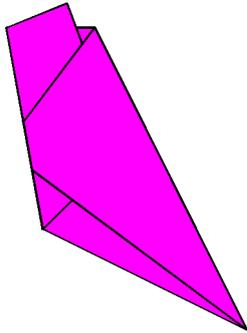
13. Remake fold 6.

14



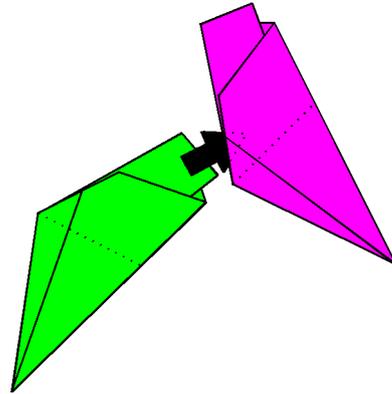
14. Tuck the left corner of the front layer into the pocket behind it using the existing crease.

15



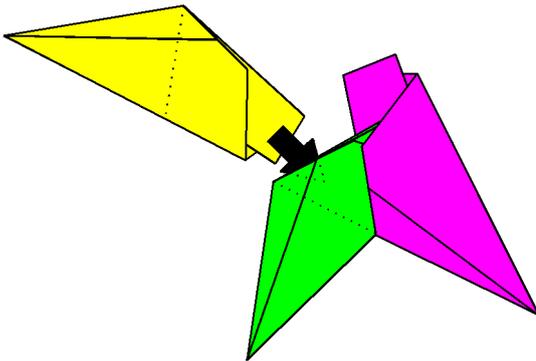
15. The module is finished. Make five in contrasting but complementary colours.

16



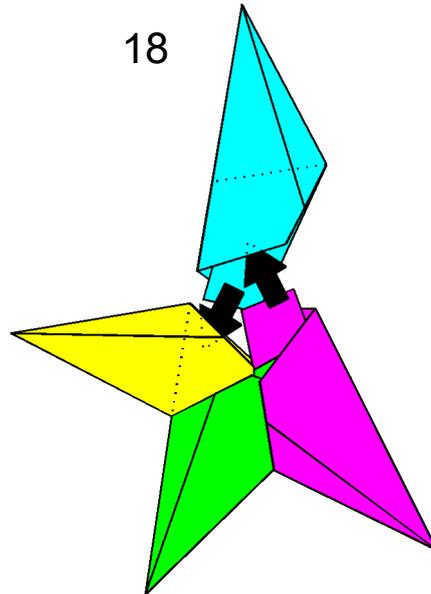
16. Two modules go together like this.

17



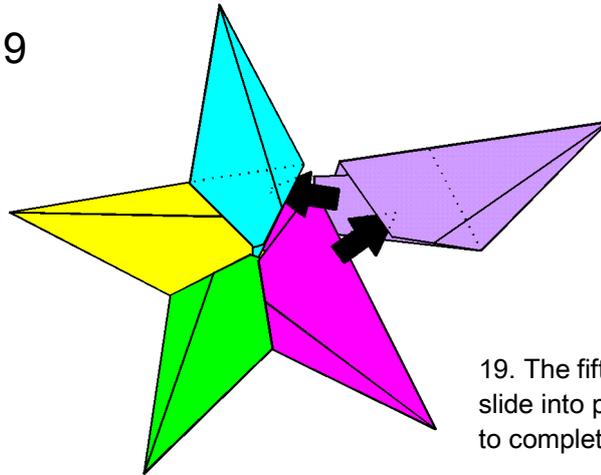
17. Add the third module like this

18



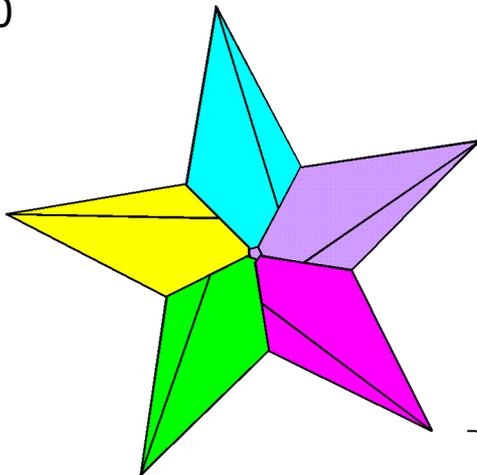
18. and the fourth like this.

19



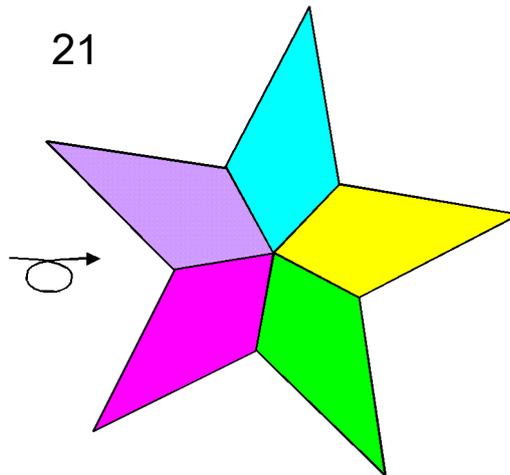
19. The fifth module will slide into place like this to complete the star.

20



20. Turn over sideways.

21



21. Gently but firmly ease all the modules together so that they all meet in the centre of the star at a single point and the assembly becomes secure. Be patient about doing this. Once it has been achieved you will be able to pick Pentangle up by any of the points without the risk of it falling apart.

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