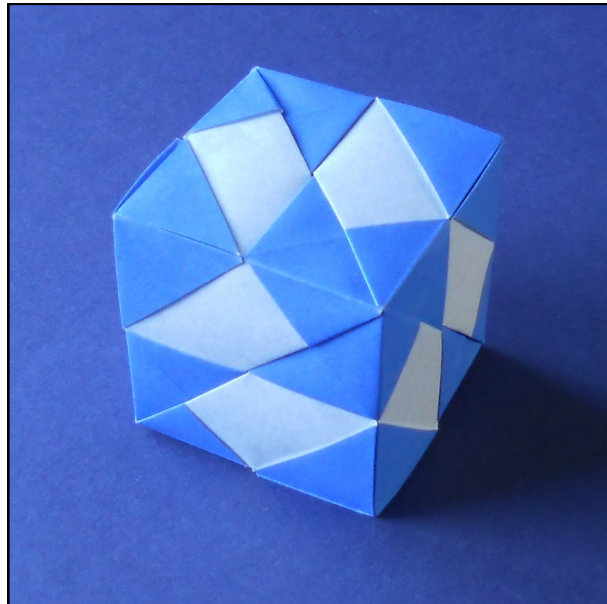


The Broken Square Cube

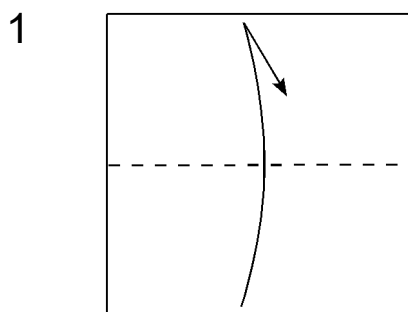
Designed by David Mitchell

The module for this simple decorative cube, which I discovered in 2001, is based on the division of a square into a grid of nine smaller squares. It is quite an elegant design to fold and assemble.

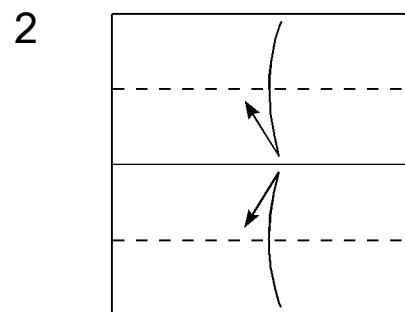
As the module is a centre-pocket parallelogram module it should, in theory, be possible to use reconfigured versions to make other forms. I have not yet experimented to confirm this.



You will need six squares of irogami to make the cube and another square of the same size to use as a template. These diagrams show you how to make a Broken Square Cube using two squares in each of three contrasting but complementary colours but using just a single colour also works well.



1. Fold the template square in half upwards, crease, then unfold.



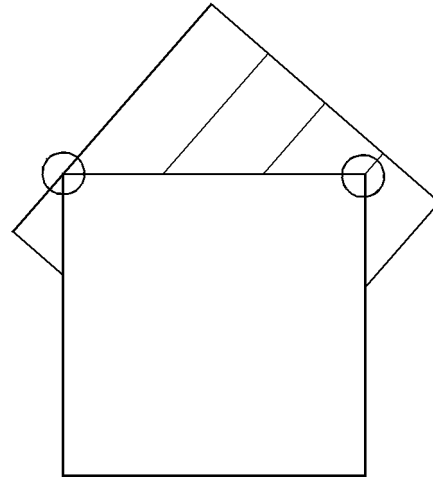
2. Fold both the top and bottom edges to the middle, crease, then unfold.

3



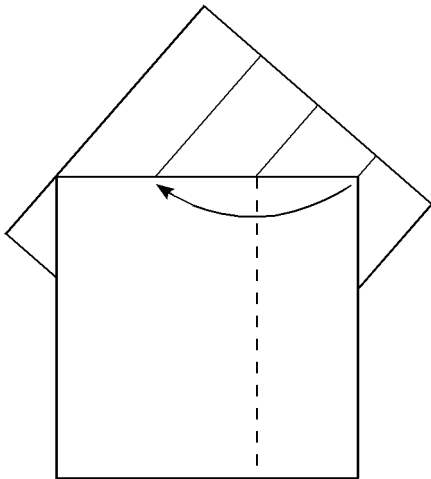
3. The template is finished.

4



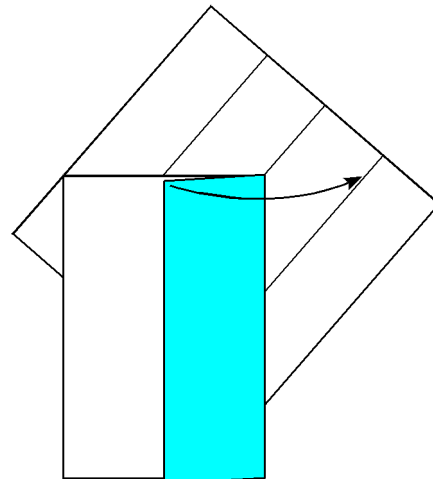
4. Laying the first of your six squares, white side up, on top of the template like this, making sure the corners are aligned to the edge of the template and the crease in the way marked with circles here.

5



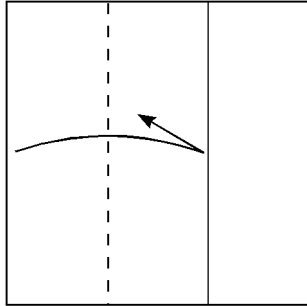
5. Fold the right hand corner inwards as shown. Make sure the two squares don't slip out of alignment as you make this fold.

6



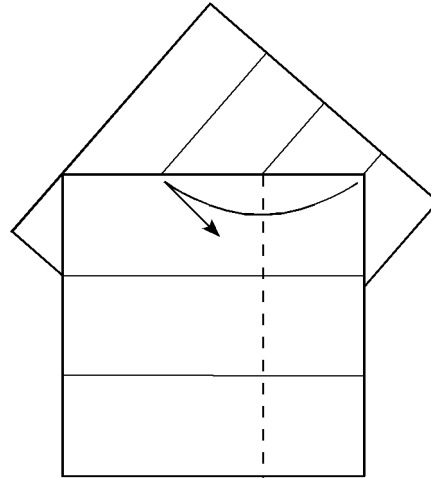
6. Open out the fold made in step 5 and remove the square from the template. Arrange with the crease at the top to look like picture 7.

7



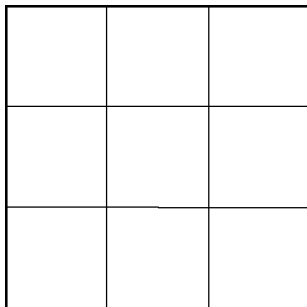
7. Fold the left hand edge onto the crease made in step 5, crease, then unfold.

8



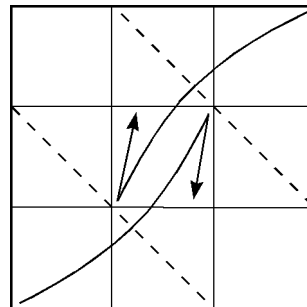
8. Your paper is now divided into thirds. To divide the paper into thirds in the other direction as well, rotate through ninety degrees and repeat steps 4 through 7.

9



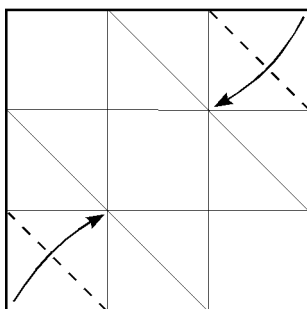
9. Your first square should now look like this.

10

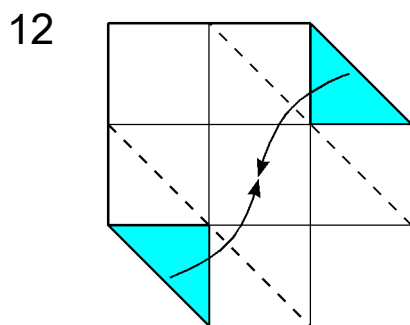


10. Fold the top right and bottom left corners inwards as shown, then unfold, in turn.

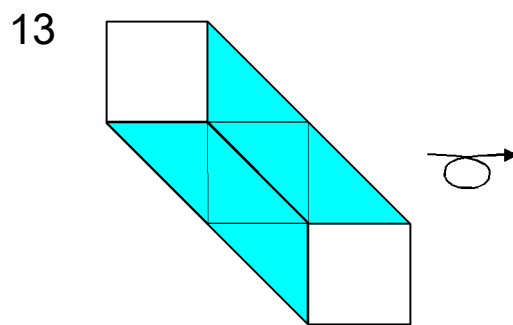
11



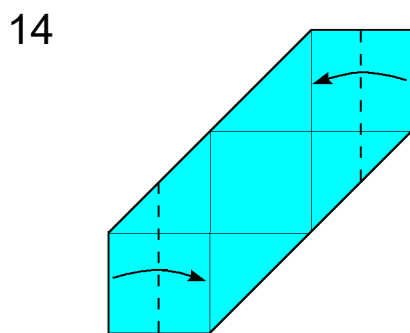
11. Fold the top right and bottom left corner squares in half diagonally inwards like this.



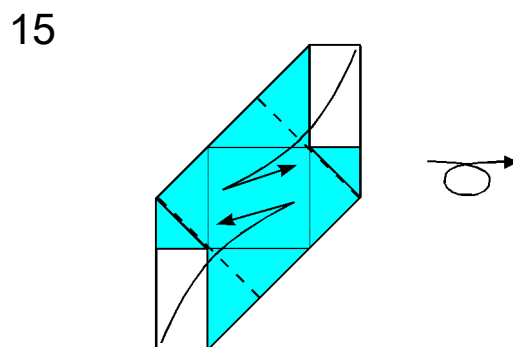
12. Remake the creases made in step 11.



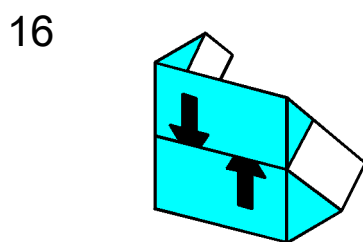
13. Turn over sideways.



14. Fold the right and left outside edges inwards as shown.

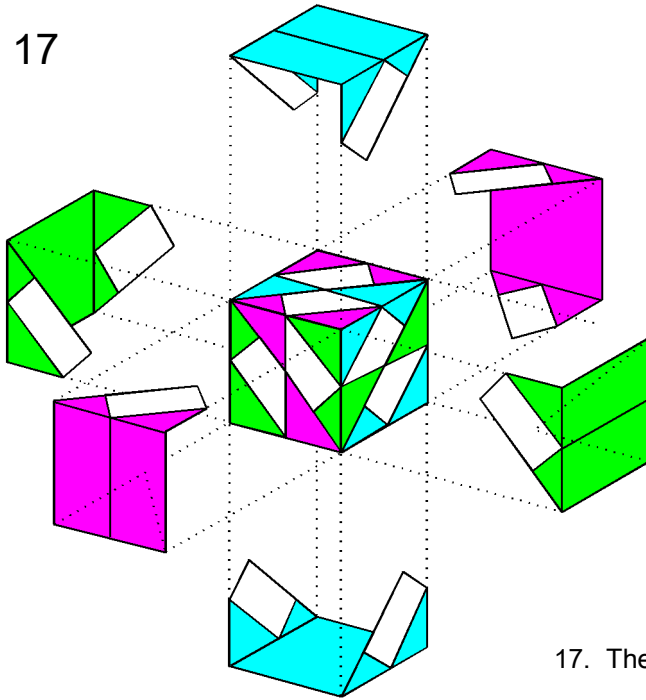


15. Fold the top right and bottom right corners inwards as shown then open out at right angles. Turn over to look like picture 16.



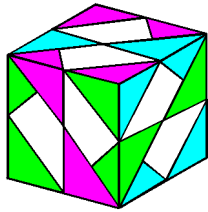
16. This is the finished module. It has two tabs and two pockets (indicated by arrows). Make all six.

17



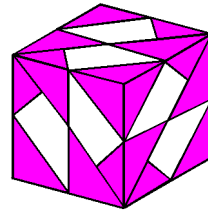
17. The six modules go together like this.

18



18. The finished 3-colour Broken Square Cube will look like this ...

19



19. ... and the single colour version like this.

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