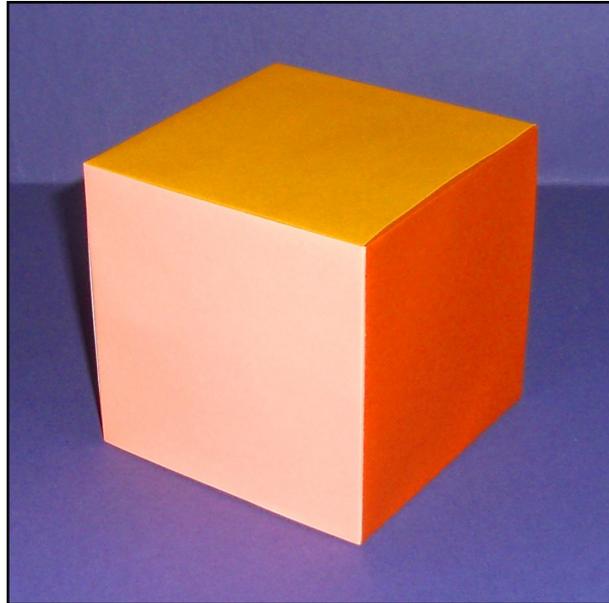


The Unconventional Cube

The Unconventional Cube is a basic, stable modular cube with faces which are not crossed by edges or creases. It is made from six modules, folded from squares, each of which is made using just three active folds, which qualifies it as a minimalist modular design.



The most interesting aspect of this cube for the modular aficionado is, however, that it is an irregular assembly design. Each module

possesses two tabs and one pocket. One of these tabs is tucked into the pocket on a second module and the other goes in between the two tabs of a third, in the way that is similar to the method used in the classic Paul Jackson 's Cube design.

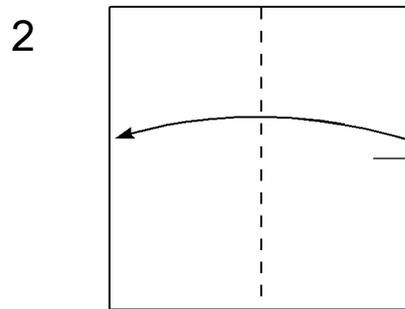
I have included diagrams for two different ways to make the modules, a symmetric method based on the use of an initial location point and an asymmetric method in which the location point is not required. I am indebted to Edu Solano Lumbreras for pointing out that when using this second method the modules can be assembled either way round ie with either the longer or the shorter tabs, or a mixture of the two, inserted into the pockets. This is of course not true with similar modules that can be used to make the Paul Jackson Cube, where two opposite longer ends would interfere with each other during assembly.

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

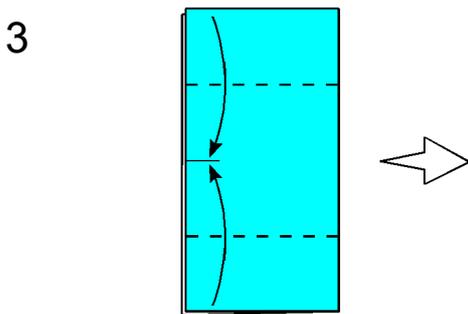
Folding the modules - the symmetric method



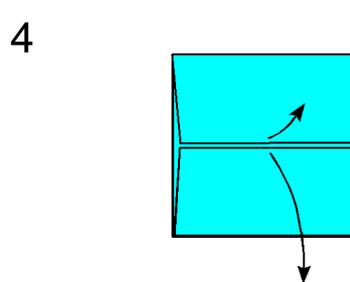
1. Make a tiny crease to mark the centre of the right edge.



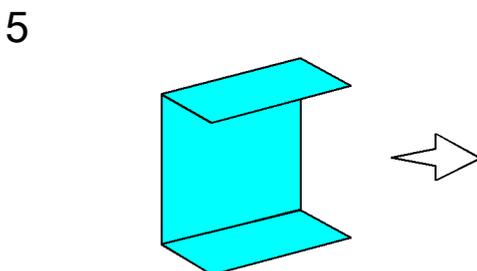
2. Fold in half sideways.



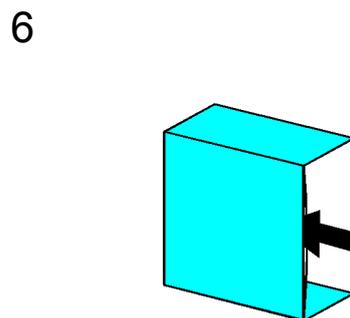
3. Fold both the top and bottom edges into the centre. The next picture is on a larger scale.



4. Unfold both front flaps to right angles.



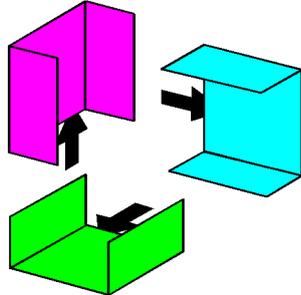
5. The module is finished. Turn over sideways.



6. There is a pocket in the right edge. Make all six.

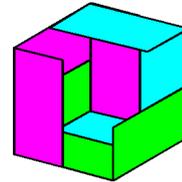
Assembling the modules

7



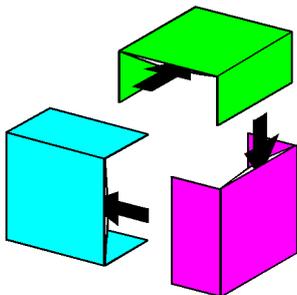
7. The first three modules go together ...

8



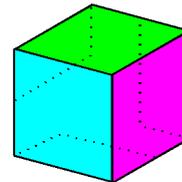
8. ... to form a sub-assembly like this.

9



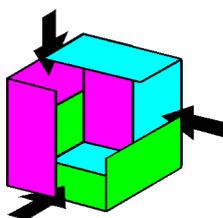
9. And the remaining three ...

10



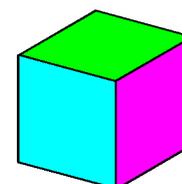
10. ... to form a second sub-assembly like this.

11



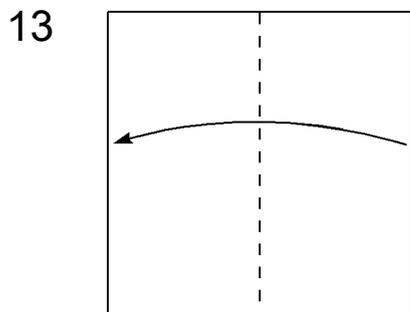
11. Put the two sub-assemblies together so that all the tabs on one subassembly slide in between the tabs on the other.

12

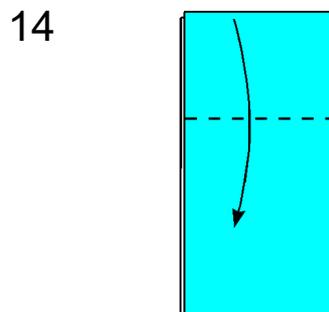


12. The Unconventional Cube is finished.

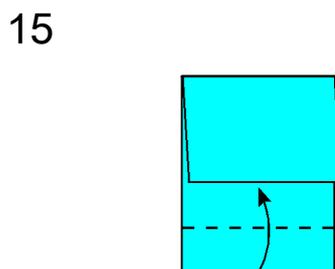
Folding the modules - the asymmetric method



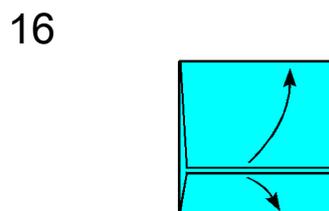
13. Fold in half sideways.



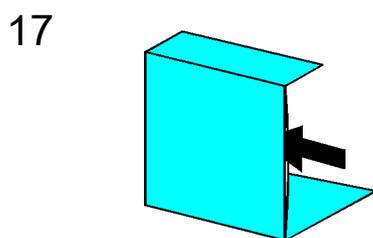
14. Fold the top edge downwards a random amount.



15. Fold the bottom edge upwards to lie along the bottom edge of the front layers.



16. Open both front flaps up at right angles and turn over sideways.



17. This is the finished module. All six modules can be different. They can be assembled in exactly the same way as the symmetric modules. Either the long or the short flap can be tucked into the pocket (unless the short flap is very short indeed – in which case it is better in the pocket than out).

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