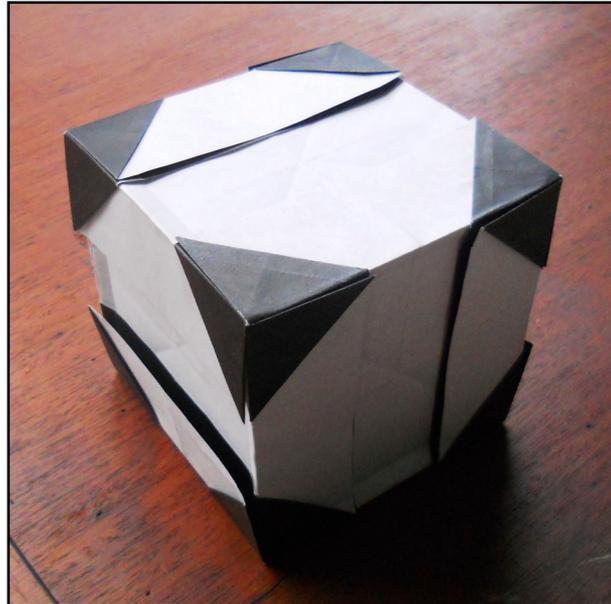


The Photo Frame Cube and the Yakkosan Cube

Designed by David Mitchell

The Photo Frame Cube is a variation of the traditional Playing Card Cube which allows each face of the cube to be filled with inserts such as square photos or folded motifs. The proportions of the modules can easily be varied to fit inserts of many different sizes.

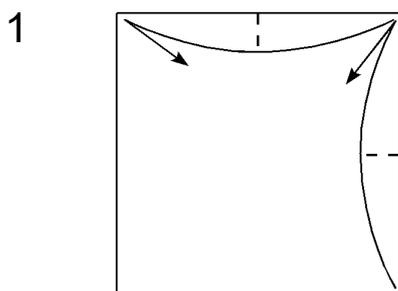


The instructions show you how to adapt traditional Yakkosan as inserts to create a Yakkosan Cube.

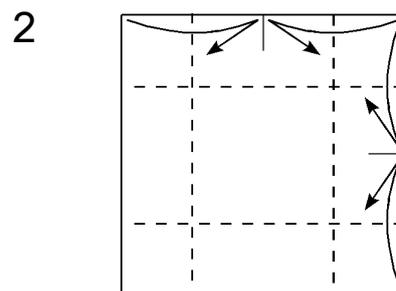
The Photo Frame Cube was designed in 2018.

Making the basic design

You will need two sheets of paper in each of three contrasting but complementary colours.

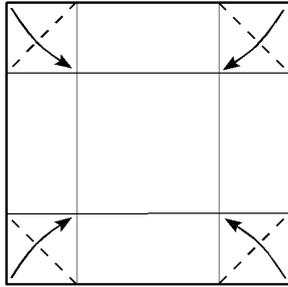


1. Make two tiny pinches to mark the centres of the top and right hand edges.



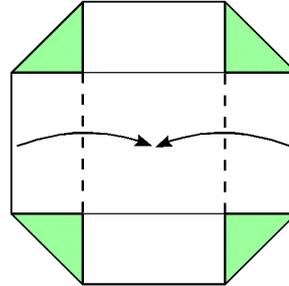
2. Fold the left and right edges into the centre using the pinch mark as a guide, then unfold. Do the same thing with the top and bottom edges.

3



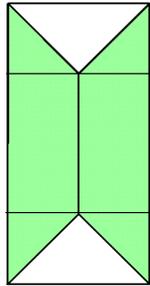
3. Fold all four corners inwards as shown

4



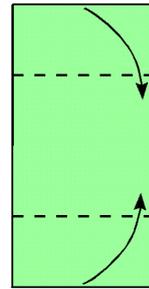
4. Fold the left and right edges inwards using the existing creases.

5



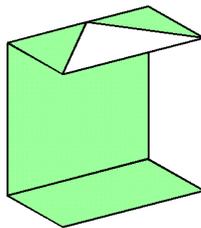
5. Turn over sideways.

6



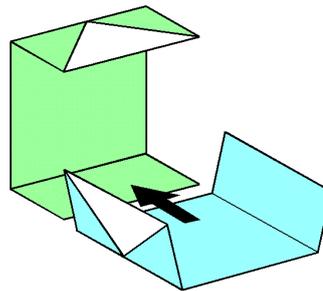
6. Fold the top and bottom edges forwards at right angles using the existing creases.

7



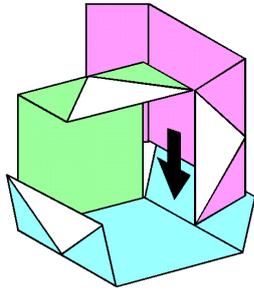
7. This is what the finished module should look like. Make all six.

8



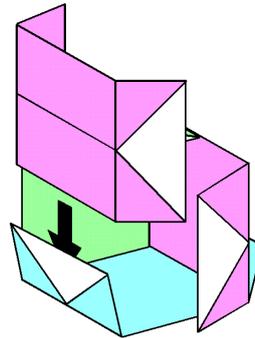
8. Slide the first two modules together like this.

9



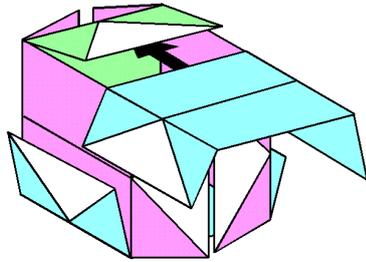
9. Add a third.

10



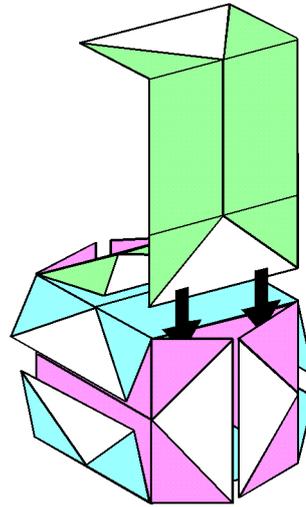
10. And a fourth. Make sure all the flaps are left on the outside of the assembly.

11



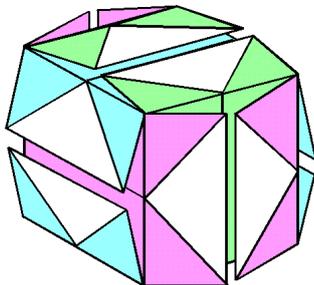
11. The fifth module is added like this.

12



12. And the sixth like this.

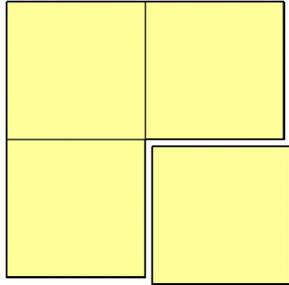
13



13. The cube should now look like this. Each face is provided with four pockets into which the corners of a small square of paper will slide. At this stage the cube looks a bit ragged but once the inserts are in place the faces will lie flat and the cube will neaten up.

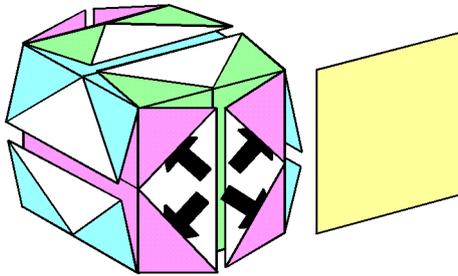
Making and adding the inserts

14



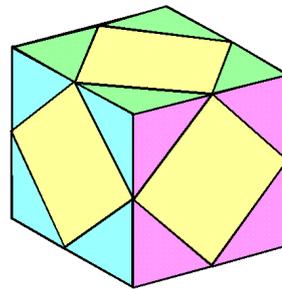
14. Fold two more squares of the same size as you folded the basic modules from, but of a different colour, in half edge to edge in both directions then cut along the creases to separate them into eight smaller squares. Only six of these squares are needed.

15



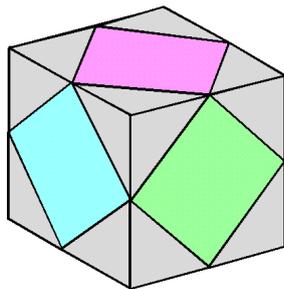
15. Carefully slide the corners of the first square into the corner pockets of the first face, taking care not to make any creases in the insert.

16



16. Repeat for all six faces. The basic version of the Photo Frame Cube is finished.

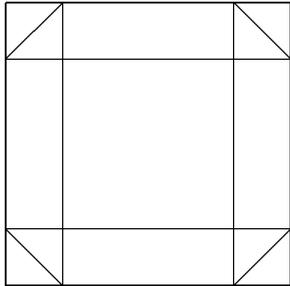
17



17. You can also make the basic design using paper of just one colour for the modules and three (or more) other colours for the inserts.

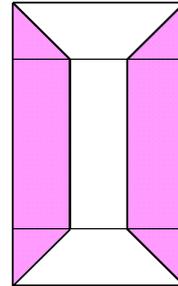
Varying the proportions

18



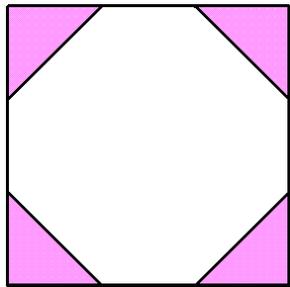
18. The basic version of the Photo Frame cube is based on a 4x4 grid. Similar cubes can be made based on other regular grids. This picture shows the creases that would be required to fold a module from a 6x6 grid.

19



19. Folded to the equivalent of step 5 the design based on a 6x6 grid would look like this...

20

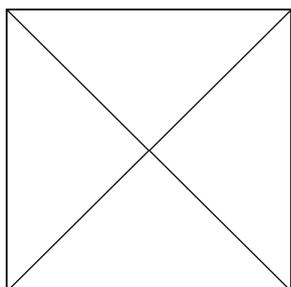


20. ... and each face of the finished cube would look like this. The corner pockets into which the inserts fit become smaller as the number of squares in the grid increases.

Customising the frame size

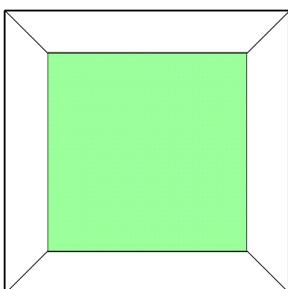
The faces can be customised to fit square photos or inserts of any size.

21



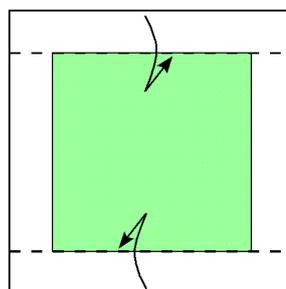
21. Begin by folding your square in half diagonally, then unfolding, in both directions.

22



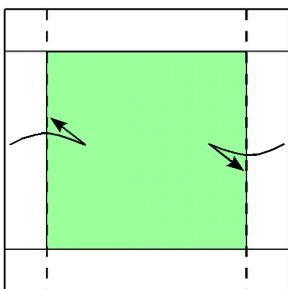
22. Place the photo on your square so that all the corners rest on the diagonal creases.

23



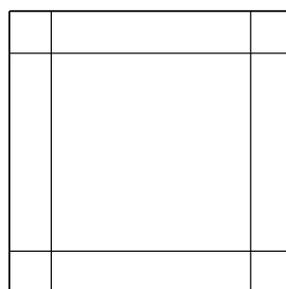
23. Fold the top and bottom edges inwards around the edges of the photo, making sure the photo does not move as you do this.

24



24. Fold the left and right edges inwards around the edges of the photo, making sure the photo does not move as you do this.

25

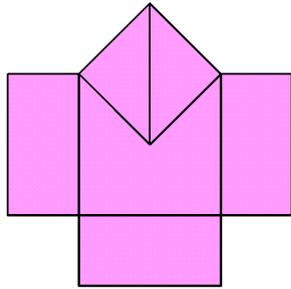


25. Remove the photo then follow steps 3 through 6 to create the module. Make all the modules, assemble, then insert the photos to complete the cube.

Making a Yakkosan Cube

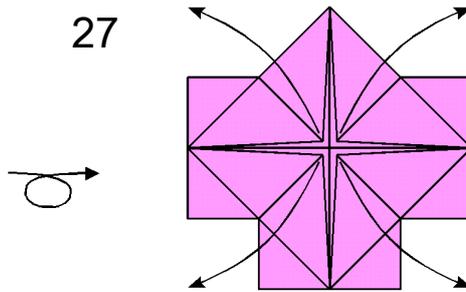
The faces of a Photo Frame Cube can also be filled with folded paper motifs. A Yakkosan Cube can, for instance, be easily made by adapting six Yakkosan as inserts for a basic cube in the way shown below.

26



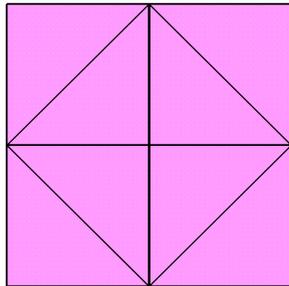
126 This is the traditional Yakkosan made by triple blintzing a sheet of square paper of the same size as the squares used to make a basic cube. Turn over sideways.

27



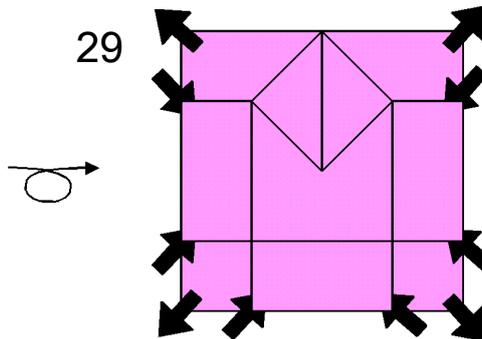
27. Open out the top flaps and flatten the creases.

28



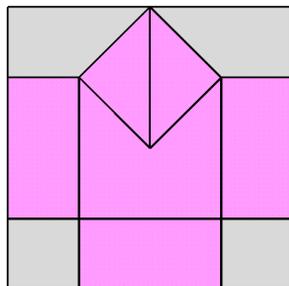
28. Turn over sideways.

29



29. Slide the corners of the insert into the pockets at the corners of one face of a basic cube, making sure the sleeves and trousers of Yakkosan remain outside them.

30



30. The finished face of the cube will look like this. Many other types of inserts can be made. In some cases it may be necessary to use squares of different sizes for the modules and the inserts.

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