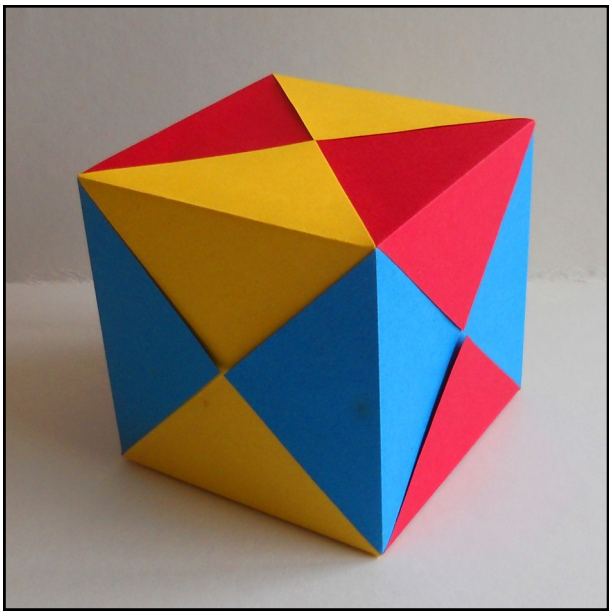
The Harlequin Cube

Designed by Kenneth Kawamura



The Harlequin Cube was first designed by Kenneth Kawamura in the early to mid 1970s and diagrams were included in his booklet entitled 'Geometrical Compound Origami - Meditations on a Waterbomb' which was published in 1977. It is in essence a more refined version of the traditional 6-Card Cube.

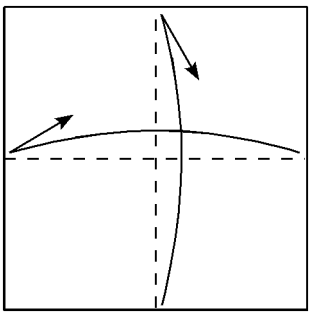
Once firmly flattened, creases are resistant to being opened out again. In the Harlequin Cube this property is used to hold all the flaps neatly in place against the layers inside and outside them. In consequence the Harlequin Cube is an even distribution design.

I discovered this design for myself in 1987, and called it the Blintz Cube. You may still find references to it under this name. The photograph above is of my own original version, folded from dyed paper taken from a telephone note pad. The paper has become foxed over the years and is crumpled in places, but is still in pretty good shape considering its age.

For clarity, the diagrams have been shaded to show one side of the paper white and one coloured, but irogami is not necessarily the best paper to use for this design, unless you can find some that is quite crisp and strong. If you make it from ordinary thin origami paper the design will still work but it will be unnecessarily delicate.

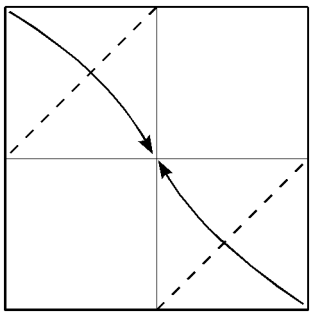
You will need six squares of paper, preferably two in each of three contrasting but complementary colours. If you are using irogami begin with your paper arranged white side up.

1



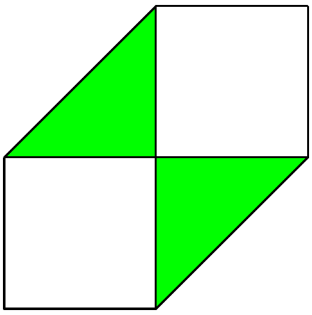
1. Fold in half edge to edge, then unfold, in both directions. These creases are just there to locate the centre of the paper and will be hidden when the design is finished.

2



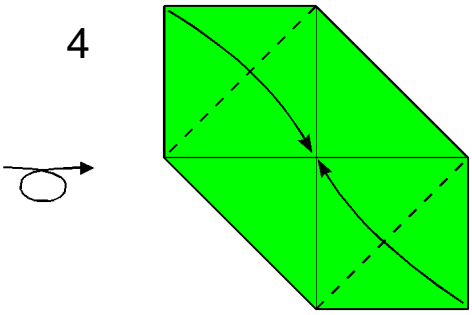
2. Fold two opposite corners into the centre.

3



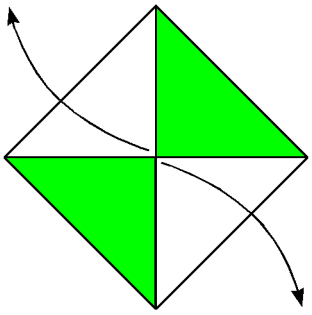
3. Turn over sideways.

4



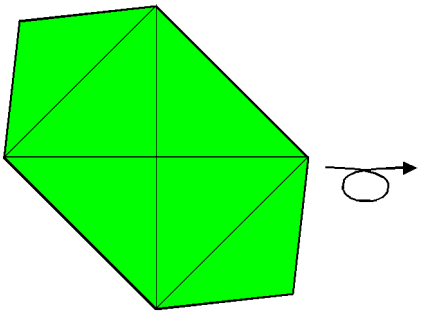
4. Fold the other two corners into the centre as well.

5



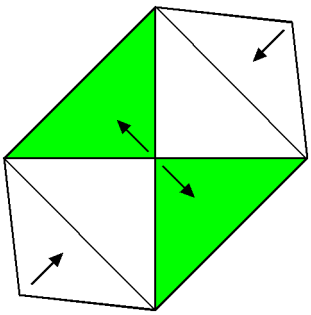
5. Partially open out the two front flaps but do not flatten the creases.

6



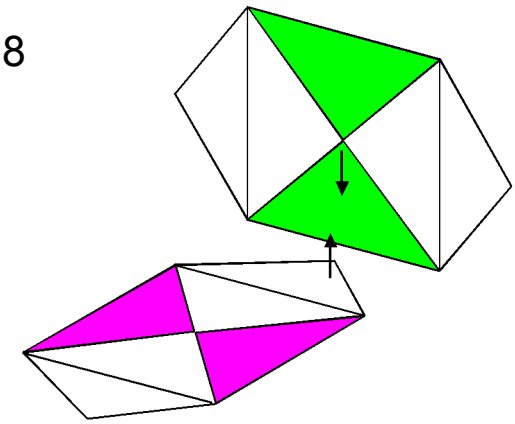
6. Turn over sideways.

7



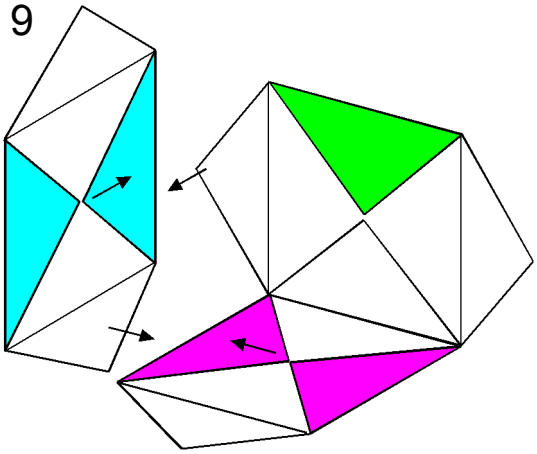
7. The module is finished. Make all six. As you assemble the modules you will need to open out or pull in the flaps in the direction indicated by the arrows. It is essential to the design that you do not flatten the creases when you do this.

8



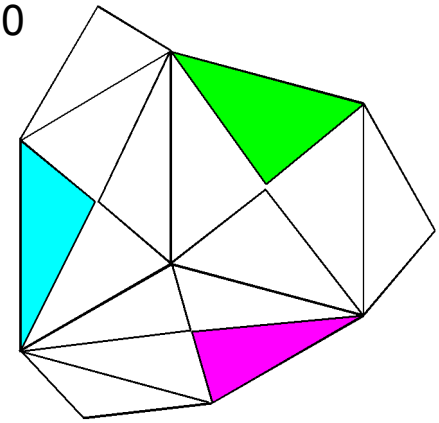
8. Offer the first two modules to each other like this. The white flap is pulled up to go inside the green module. The green flap is pulled down to go outside the magenta one. The modules will not hold together until most of them are in place. This should be a good test of gentle handling and dexterity!

9



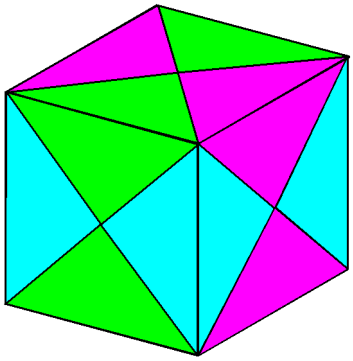
9. The third module is added like this. The white flaps go inside and the coloured flaps outside the walls of the cube.

10



10. The design will still not be stable at this stage. Add the remaining modules in the same way, making sure all the flaps go in the correct positions and the tension in the creases is not compromised.

11



11. The finished Blintz Cube will look like this. You may want to reinforce the creases at the edges slightly to obtain a clean finish but be careful not to overdo this or the outside flaps may no longer sit flush to the surface below them. Folding and assembling a clean version of this design is a challenge.