Ad Infinitum

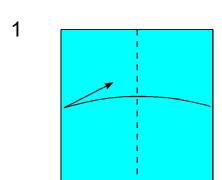
Designed by David Mitchell

Ad Infinitum is a simple modular origami toy from 1995. Each of the four panels can be swivelled from front to back, or vice versa, in turn to alter the appearance of the design, either in pairs, or individually in sequence, depending on the way in which they have been assembled. You can keep on doing this Ad Infinitum and inveterate fiddlers probably will.

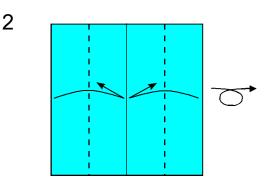


Ad Infinitum is best made in four pieces, although it can be made from one long strip, each of which should be folded from a square of a contrasting but complementary colour or pattern. Although the overall design is a modern one, each of the pieces it is made from is a traditional Japanese fold known as the Pig Base.

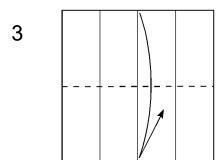
If you are using irogami begin with your paper arranged coloured side up.

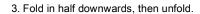


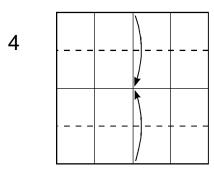
1. Fold in half sideways, then unfold.



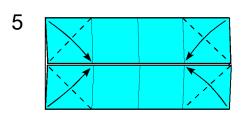
2. Fold both outside edges onto the vertical centre crease, then unfold. Turn over sideways.



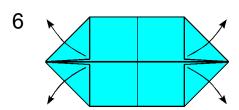




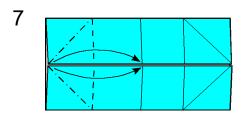
4. Fold both the top and bottom edges onto the horizontal centre crease.



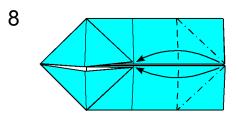
5. Fold all four corners inwards like this.



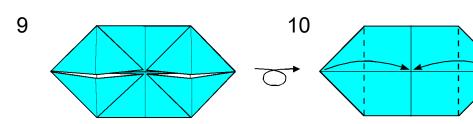
6. Open out the folds made in step 5.



7. Fold the left corners of both front flaps inwards using the existing creases and squash to look like picture 8.

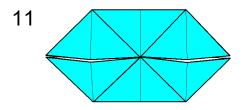


8. Repeat step 7 on the right hand half of the paper.

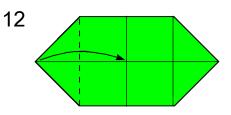


9. Turn over sideways.

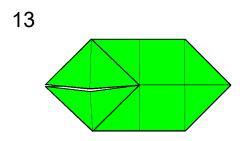
10. Fold both outside corners inwards allowing the hidden layers to flip into view. The result should look like picture 11.



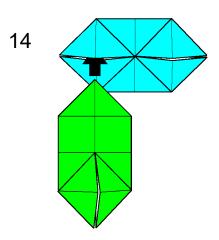
11. The first module is finished. Make 2. The other two modules are finished by following step 12 instead of step 10.



12. When making the other two modules just fold the left corner inwards, allowing the hidden layers to flip into view. The result should look like picture 13.

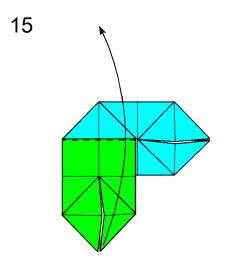


13. Make 2.

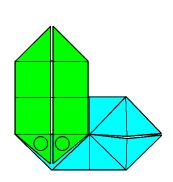


14. Rotate the second module through 90 degrees and slide it up inside the first module like this.

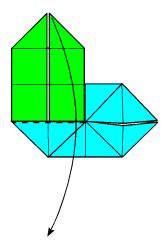
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15. Fold the bottom part of the second module upwards like this, making sure the modules do not come apart.

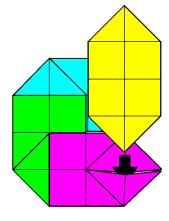


16. Tuck the two triangular flaps marked with circles into the pocket underneath them.



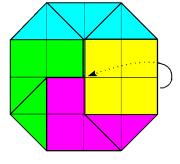
17. Fold the top part of the second module downwards again. The two modules should now be firmly locked together.

19



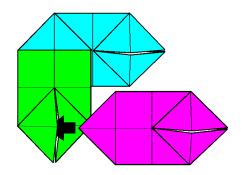
19. Begin adding the fourth module by turning it over and linking it to the third module in the same way.

21



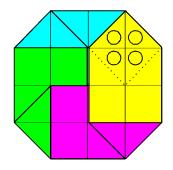
21. Ad Infinitum is finished. Begin manipulating it by rotating the right hand flap backwards.

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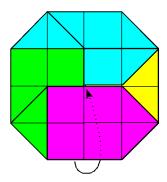
18. Add the third module in the same way, making sure all the flaps of the third module go inside the pockets underneath them.

20

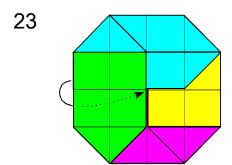


20. Finish adding the fourth module by inserting all the flaps inside the pockets underneath them. It is easiest to insert the two small flaps first.

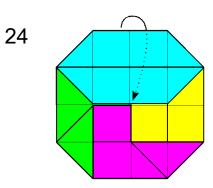
22



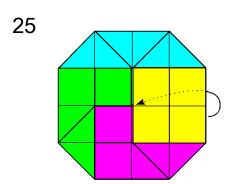
22. The bottom flap is now free to rotate backwards in a similar way.



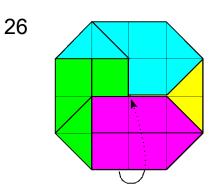
23. This frees the left hand flap which will also rotate backwards.



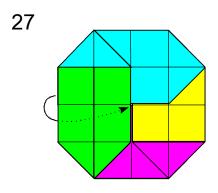
24. As will the top flap now.



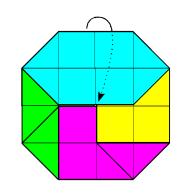
25. You will see that the pattern of the colours is now the same as in picture 20 but the modules are the other way up so that the some of the slits are visible.



26. Continue by rotating the bottom flap backwards again.

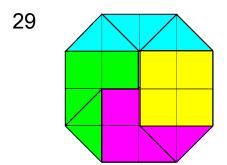


27. Then the left flap.

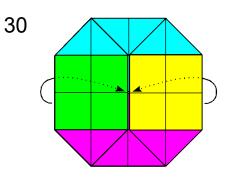


28. And finally the top flap once more.

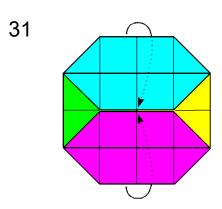
28



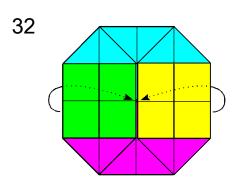
29. You are back to the starting position again. Continue flexing Ad Infinitum.



30. Alternatively you can put the same four modules together in this configuration which allows two flaps to rotate at a time. First the two outside flaps ...

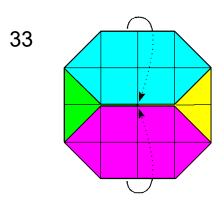


31. ... then the top and bottom flaps.

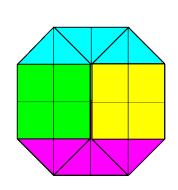


32. The outside flaps again ...

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33. ... and finally the top and bottom flaps again.



34. You are back where you started after only four steps this time.

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