

Coasters Supreme

Designed by David Mitchell

The first of these Coasters Supreme is supremely simple to fold. In fact the 1-Fold Coaster is probably the simplest possible modular origami design.

The instructions show you how to develop this first supremely simple design to produce more complex rotor and spiral patterns.

All the Coasters Supreme are folded from silver

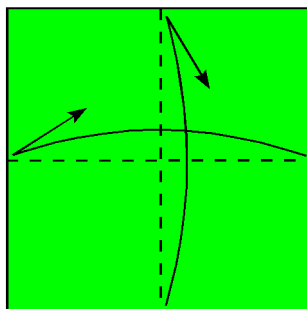
triangles. The initial diagrams show you how to cut eight of these from a standard square of irogami, but it is equally easy to cut a similar square into four, or even just two, larger silver triangles if you prefer.



These coasters are attractive modular designs in themselves but they can also be used as tiles to create intricate patterns of great beauty.

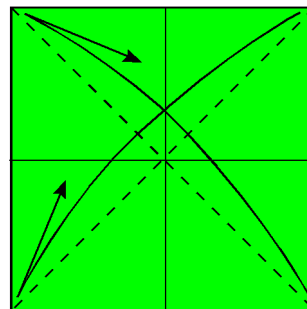
Coasters Supreme were designed in 2002.

1



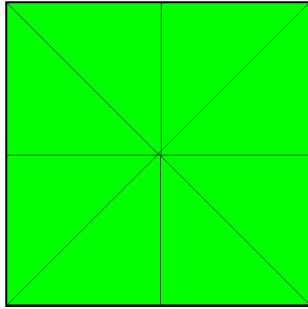
1. Fold in half edge to edge both ways and unfold.

2



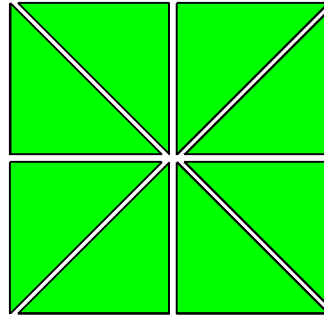
2. Fold in half diagonally both ways and unfold.

3



3. Cut along all the creases ...

4

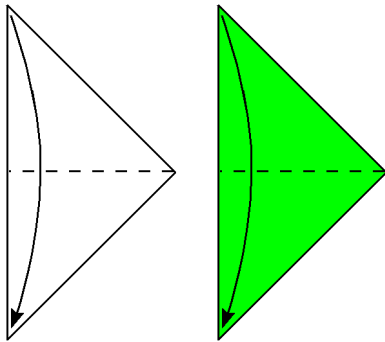


4. ... to separate the silver triangles.

The 1-fold Coaster

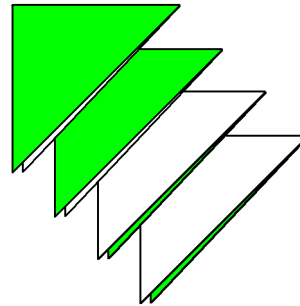
You will need four silver triangles cut from irogami. Arrange two triangles white side up and two white side down.

5



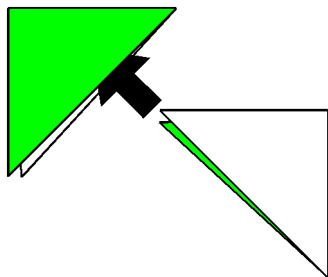
5. Fold all the triangles in half downwards like this.

6



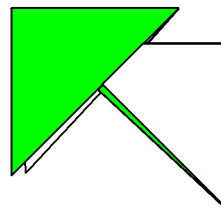
6. The modules are finished.

7



7. Two modules go together like this

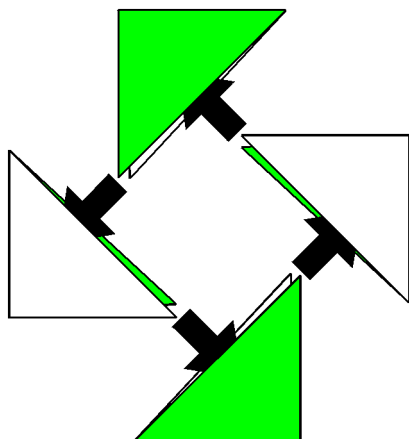
8



8. Make sure both flaps of the right hand module go in between the layers of the one on the left.

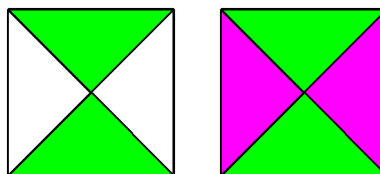
2

9



9. This is how all four modules fit together.

10

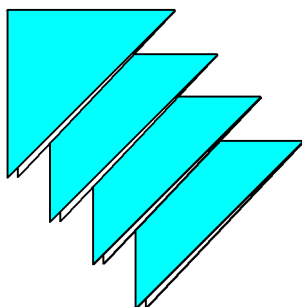


10. When all the modules are pushed fully together the 1-fold Coaster is finished. You could, of course, make this Coaster, and any of the others, using two different coloured papers rather than one colour and white.

The Rotor Coaster

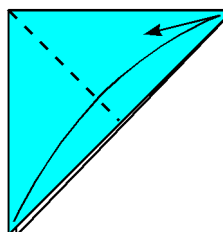
You will need four silver triangles cut from irogami. Begin by arranging all the triangles white side up and folding them in half in the way shown in step 5.

11



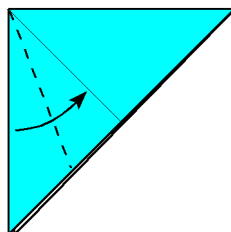
11. Your four modules should now look like this.

12



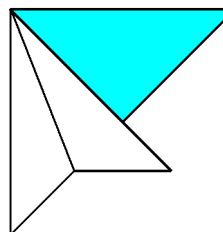
12. Fold just the front layer in half diagonally upwards, then unfold.

13



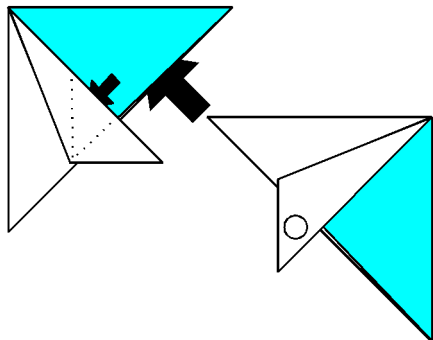
13. Fold the left hand edge of the front layer onto the crease made in step 12.

14



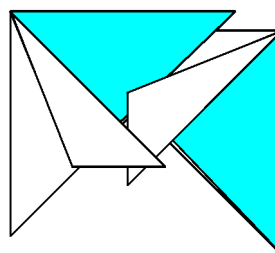
14. Fold all four modules to this stage.

15



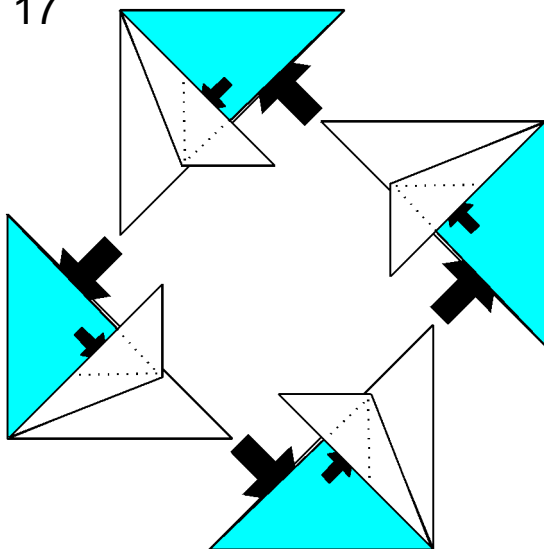
15. Two modules go together like this. Note that the flap marked with a circle goes underneath the similar flap on the host module ...

16



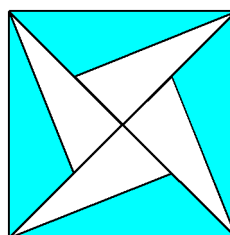
16. ... like this.

17



17. This is how all four modules fit together.

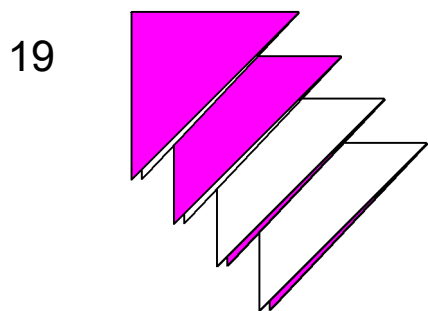
18



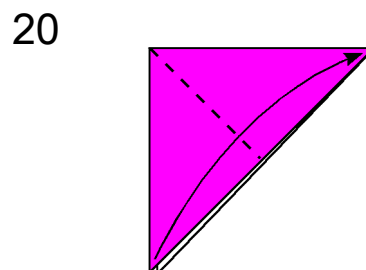
18. When all four modules are pushed fully together the Rotor Coaster is finished.

The Spiral Coaster

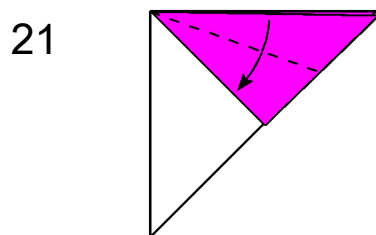
You will need four silver triangles cut from irogami. Begin by folding all the triangles to step 6 of the 1-fold Coaster.



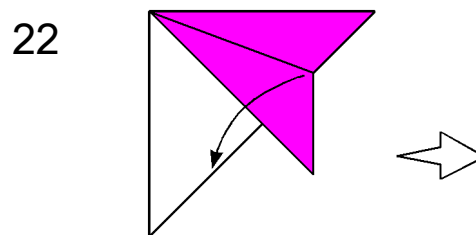
19. Your four modules should look like this.



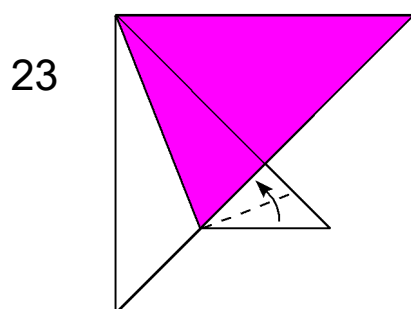
20. Fold the front layer in half diagonally upwards.



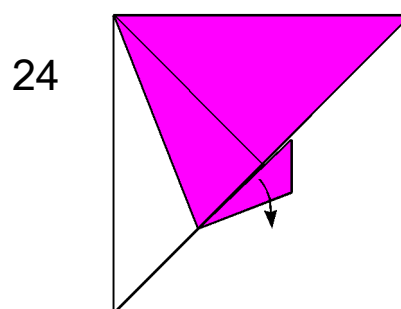
21. Fold the front layer in half downwards.



22. Fold the front flap downwards using the crease made in step 20.

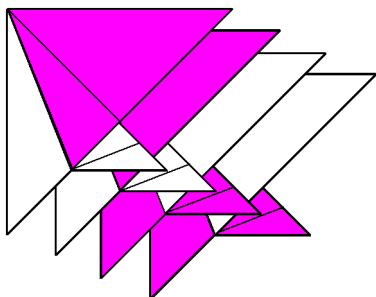


23. Fold the small white triangular flap in half upwards.



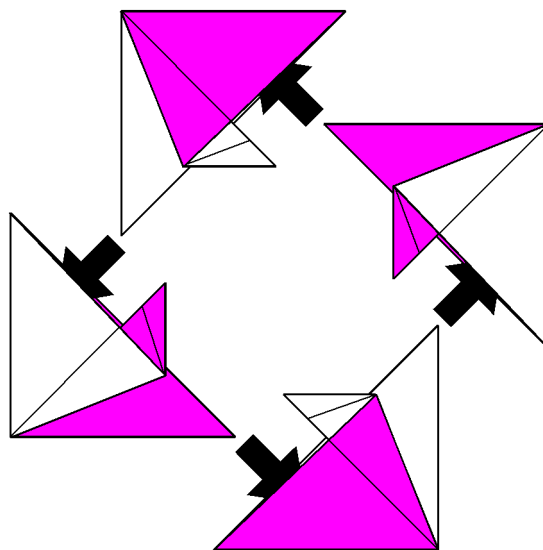
24. Undo the fold made in step 23.

25



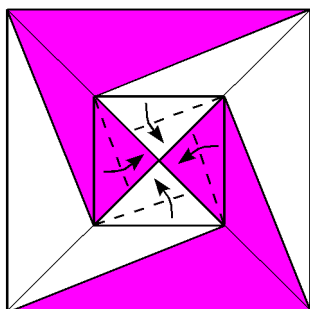
25. Fold all four modules to this stage. Remember that in two of them the colours will be reversed.

26



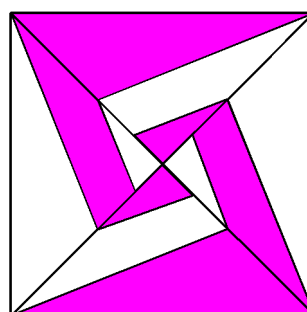
26. The modules go together like this. Note that this time the front flaps go in front of the similar flaps on the host modules.

27



27. Remake the folds made in step 23, working anticlockwise and tucking the tip of the final flap underneath the first.

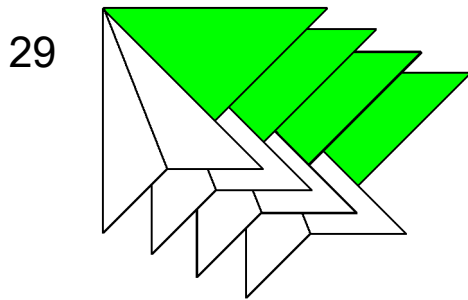
28



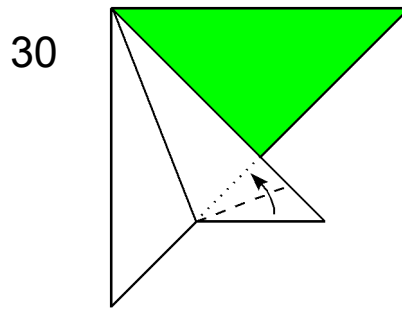
28. The finished Spiral Coaster should look like this.

The Double Rotor Coaster

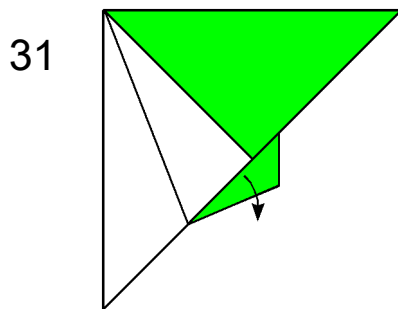
You will need four silver triangles cut from irogami. Begin by arranging all the triangles white side up and folding them to step 14 of the Rotor Coaster.



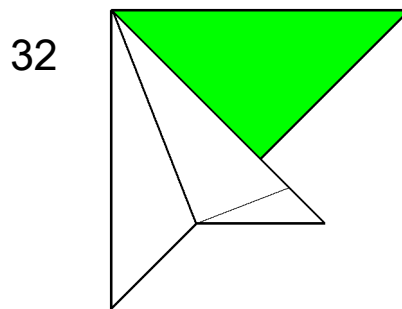
29. Your four modules should look like this.



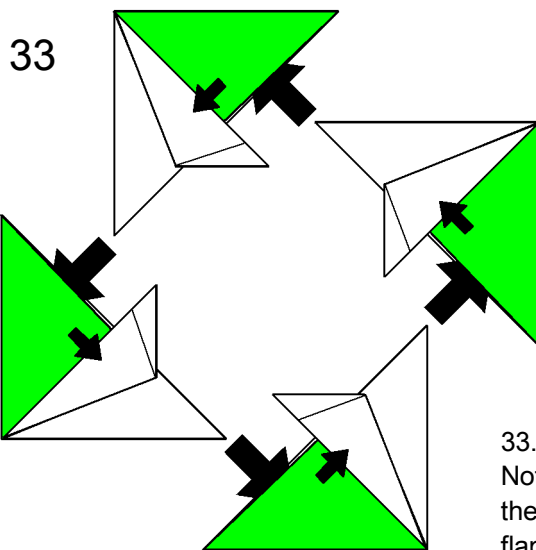
30. Fold the point of the front flap in half upwards as shown here.



31. Open out the fold made in step 32.

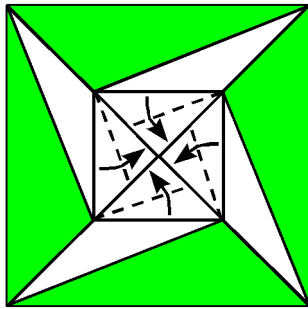


32. This is the finished module. Make all four.



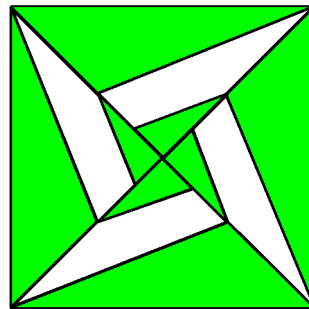
33. The modules go together like this. Note that the points of the front flaps on the guest modules lie on top of the front flaps on the host modules.

34



34. Remake the folds made in step 30, working anticlockwise and tucking the tip of the final flap underneath the first.

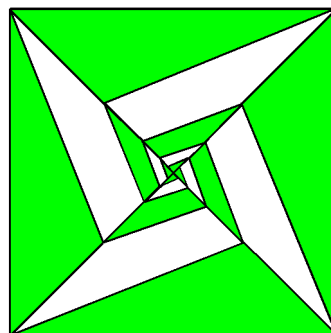
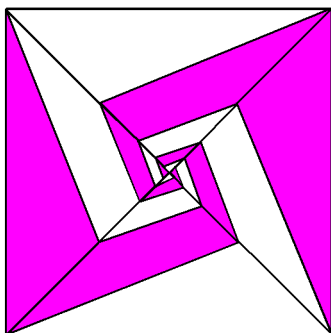
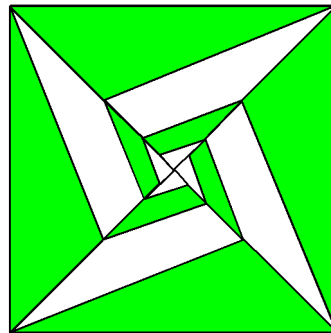
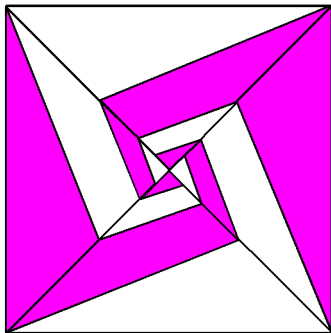
35



35. The finished Double Rotor Coaster should look like this.

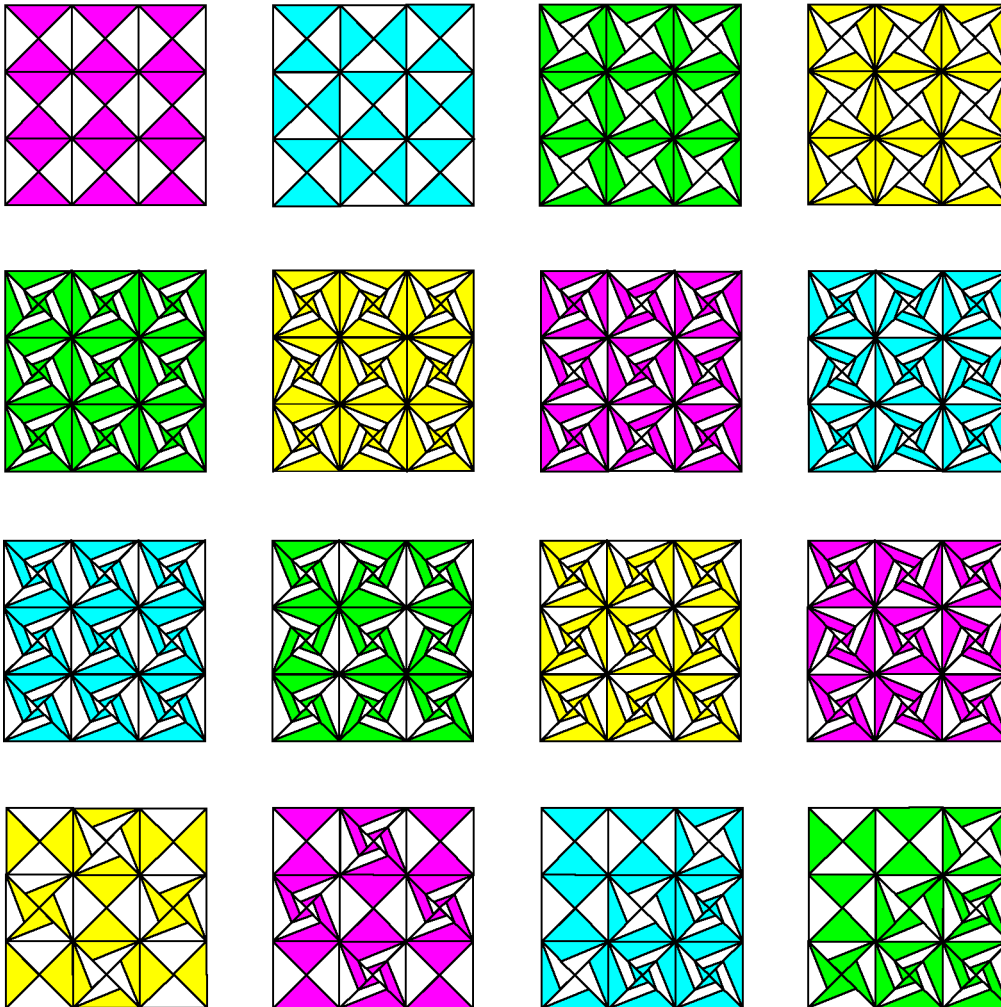
More complex coasters

If you use larger silver triangles you will be able to extend the folding sequences to produce more complex spiral and rotor coasters like the ones shown below.



Using Coasters Supreme to create tiling patterns

You can mix and match Coasters Supreme variants to produce any of the tiling patterns shown below ... and many more.



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