

Alpha and Beta Letterbox 30-Part 20-Point Stubby Stars

Designed by David Mitchell

These diagrams show you how to make 30-part 20-point Stubby Stars from Letterbox parallelogram modules, in both alpha and beta versions.

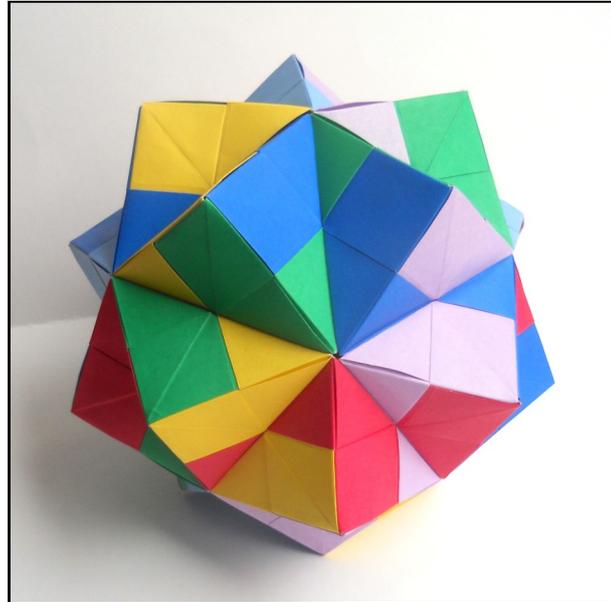
I discovered parallelogram Letterbox modules in 1987.

If you are not already familiar with the way this Stubby Star is assembled it is a good idea to practice putting together a single

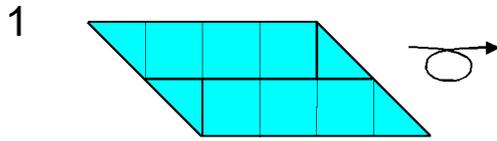
pyramid from three modules before you try to assemble all thirty.

All the stubby stars explained in these diagrams are made from plain modules. However it is, of course, possible to fold them from contrast modules instead. If you combine contrast modules of different designs and colours you can easily create a multiplicity of irregularly patterned cubes.

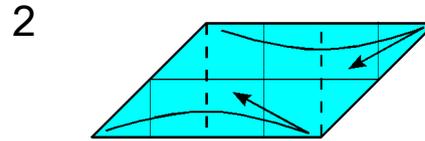
Diagrams showing you how to fold the basic form of the Letterbox module are available elsewhere on this site.



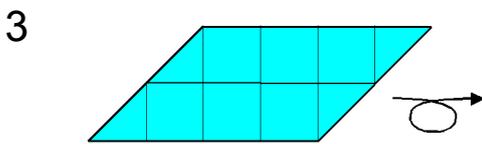
From alpha modules



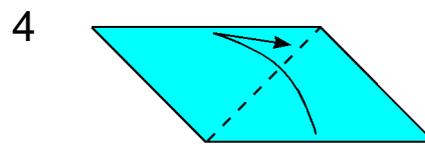
1. Begin by turning your first module over sideways.



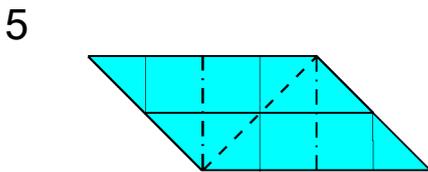
2. Fold the right and left points inwards as shown, then unfold.



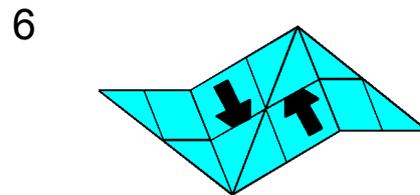
3. Turn over sideways.



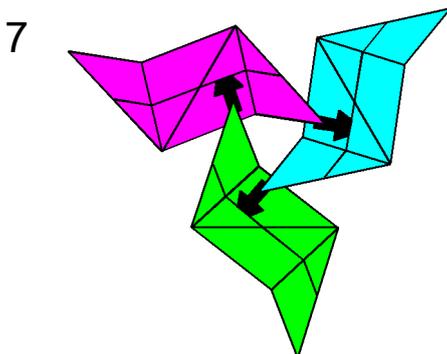
4. Fold diagonally across the central square area of the module, then unfold.



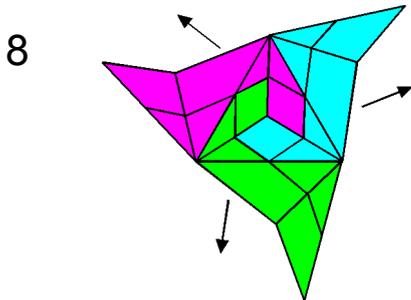
5. Use the folds you made in steps 2 and 4 to collapse the module into shape.



6. The finished module should look like this. The arrows indicate the location of the pockets. Make all 12 modules, either four in each of three contrasting but complementary colours or three in each of four colours, depending on which version you are intending to make.

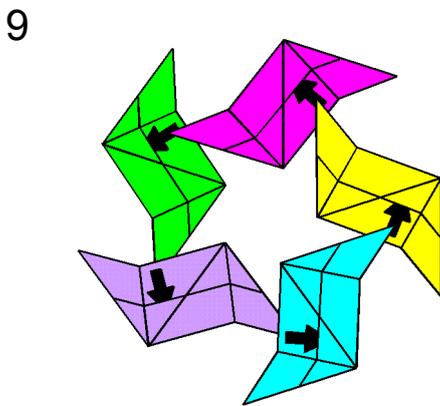


7. Put three modules of different colours together like this so that the top of the pyramid is pointing up towards you..

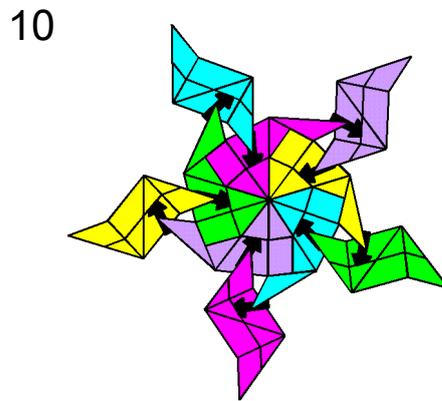


8. The result should look like this. Once you understand how this works take the modules apart again.

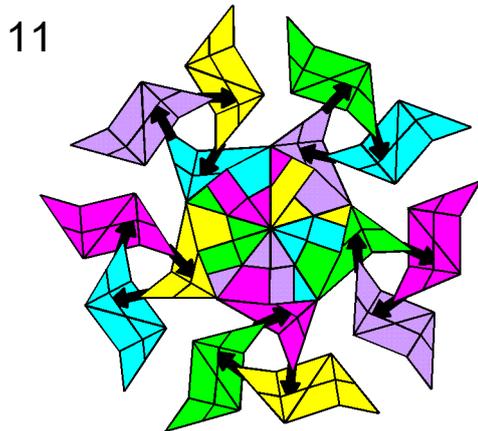
The five colour pattern version



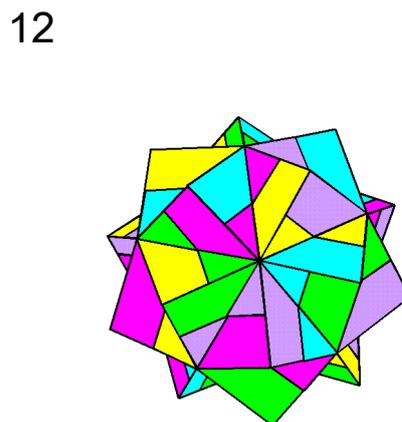
9. Put the first five modules, one of each colour, together like this.



10. Add the next five modules to complete a ring of five pyramids.



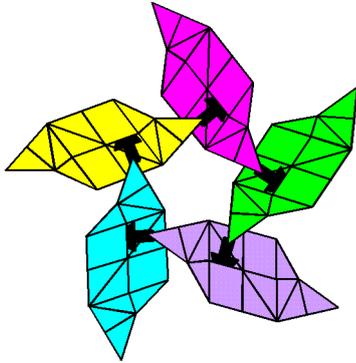
11. Continue adding modules, keeping to the pattern shown, until the Stubby Star is complete.



12. The completed five colour Stubby Star will look like this.

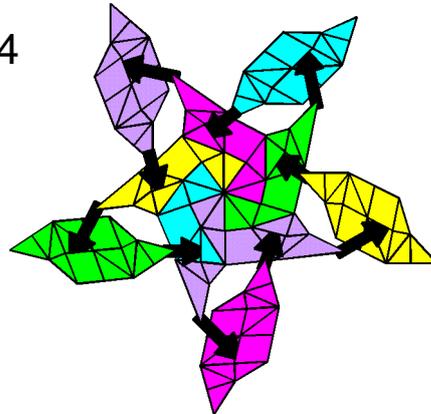
The six colour pattern version

13



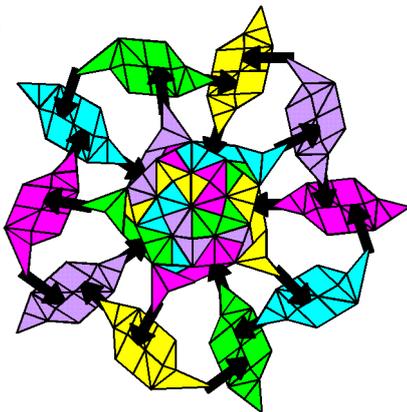
13. Begin by putting the first five modules, one of each colour, together like this.

14



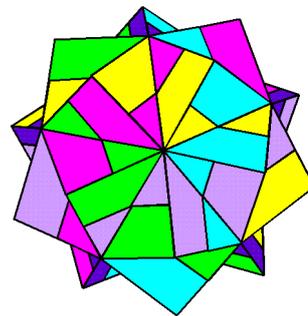
14. Add the next five modules, again one of each colour, like this to complete a ring of five pyramids.

15



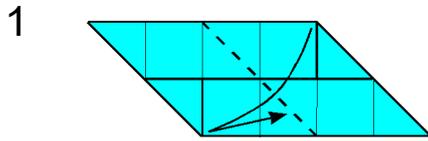
15. Continue adding modules, keeping to the pattern shown, until the Stubby Star is complete.

16

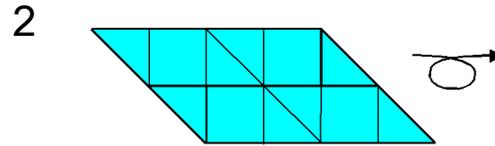


16. The finished six colour Stubby Star will look like this.

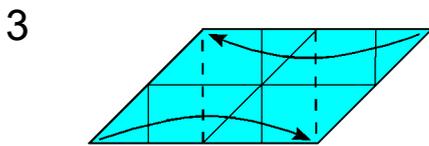
From beta modules



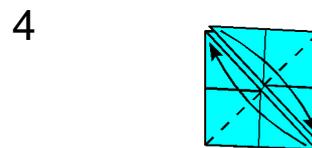
1. Fold the first module in half diagonally, corner to corner, then unfold.



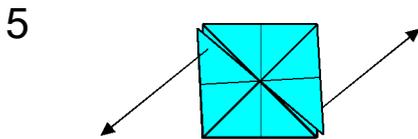
2. Turn over sideways.



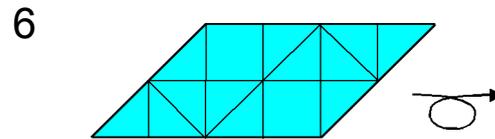
3. Fold the top left and bottom points inwards like this.



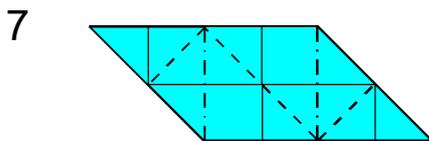
4. Fold both front flaps in half, upwards or downwards, as shown.



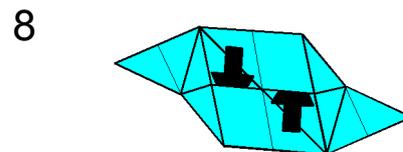
5. Open out the folds made in steps 3 and 4 but do not flatten completely.



6. Turn over sideways.

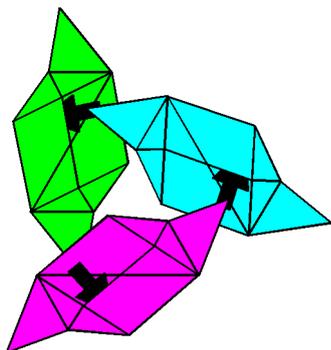


7. Use the folds you made in steps 1, 3 and 4 to collapse the module into shape.



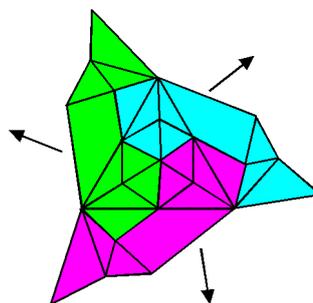
8. The finished module should look like this. The arrows indicate the location of the pockets. Make all 30 modules, either six in each of five contrasting but complementary colours or five in each of six colours, depending on which version you are intending to make.

9



9. Put three modules of different colours together like this so that the top of the pyramid is pointing up towards you.

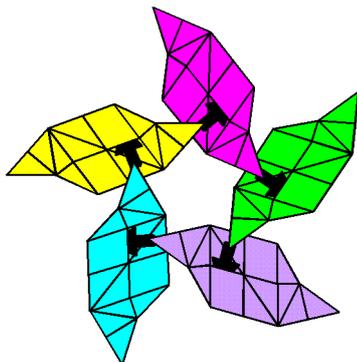
10



10. The result should look like this. Once you understand how this works take the modules apart again.

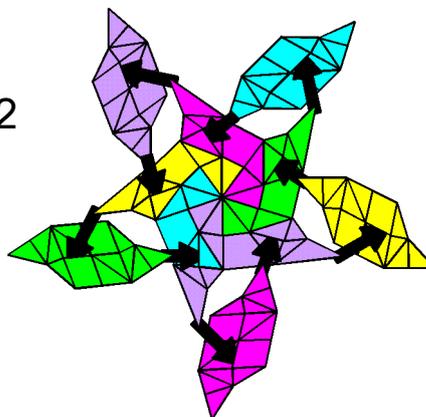
The five colour pattern version

11



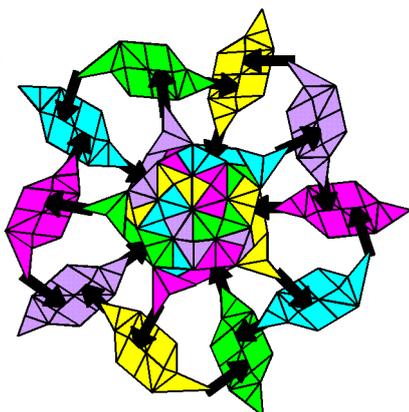
11. The first five modules, one of each colour, go together like this.

12

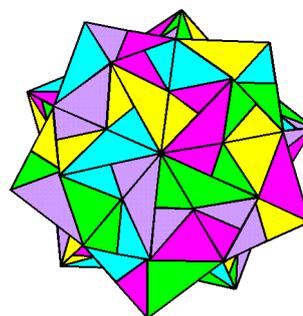


12. Add five more modules, again one more of each colour, like this to create a ring of five pyramids..

13



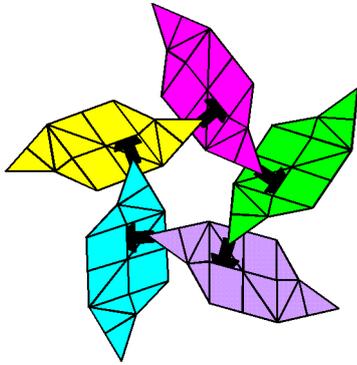
14



13 and 14. Continue adding modules, keeping to the pattern shown, so that each colour forms a band of folded squares around the Stubby Star until the design is complete.

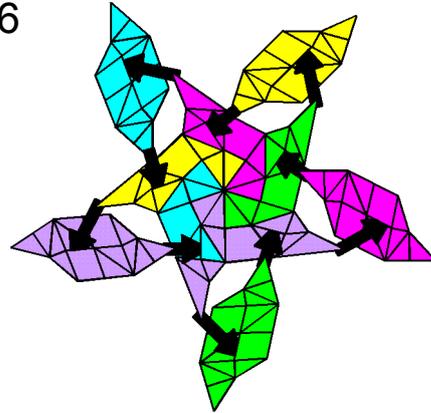
The six colour pattern version

15



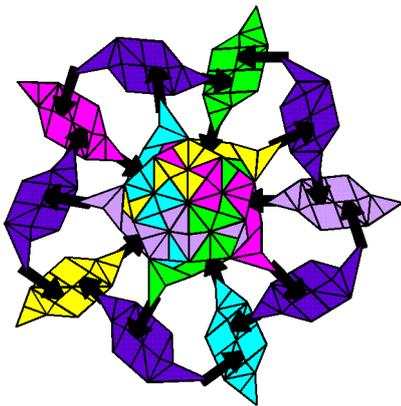
15. Five modules of five different colours go together like this to form an inside corner.

16



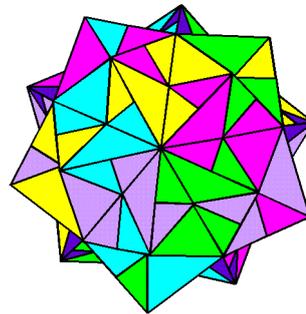
16. Add another five modules, again one of each colour, to complete a ring of five pyramids.

17



17 and 18. Continue adding modules, keeping to the pattern of colours shown, until the design is complete. The pattern of colours at the back is identical to the pattern at the front.

18



Copyright David Mitchell 2016

www.origamiheaven.com