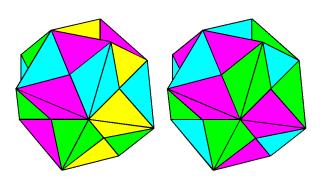
# Alpha and Beta Sonobe and Corner-pocket Sonobe 12-Part 8-Point Stubby Stars

These diagrams show you how to make 12-part 8-point Stubby Stars from Sonobe modules, in both alpha and beta versions, and from Corner-pocket Sonobe modules, but in the alpha version only. The beta Corner-pocket Sonobe version is not included because it is difficult to assemble satisfactorily.

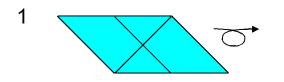


I have drawn assembly instructions for basic three and four colour versions of these designs, but because the 12-part 8-point Stubby Star is both a surface and method analogue of the 12-part cube all the other colourings explained in the Alpha and beta Sonobe and Corner-Sonobe 12-part Cube diagrams can also be applied to this design.

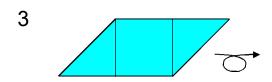
If you are not already familiar with the way this Stubby Star is assembled it is a good idea to practice putting together a single pyramid from three modules before you try to assemble all twelve.

The alpha version of the Sonobe 12-part 8-point Stubby Star was first discovered by Mitsonobu Sonobe sometime in the late 1960 's.

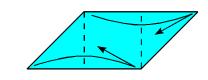
## From alpha Sonobe modules



1. Begin by turning your first module over sideways.

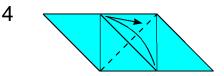


3. Turn over sideways.

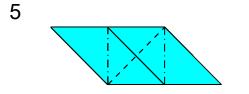


2

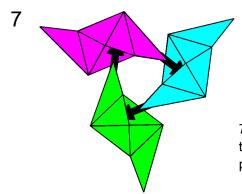
2. Fold the right and left points inwards as shown, then unfold.

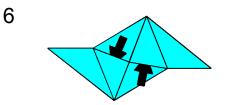


4. Fold diagonally across the central square area of the module, then unfold.



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



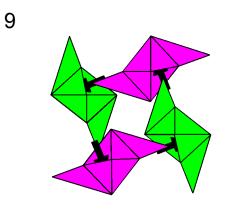


6. The finished module should look like this. The arrows indicate the location of the pockets. Make all 12 modules, either four in each of three contrasting but complementary colours or three in each of four colours, depending on which version you are intending to make.

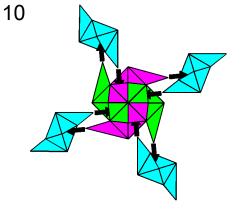
7. Put three modules of different colours together like this so that the top of the pyramid is pointing up towards you..

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

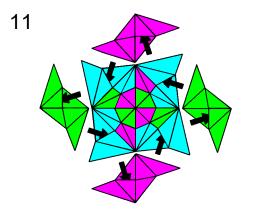
The three colour pattern version



9. Begin by putting the first four modules, two modules of two colours, together like this.



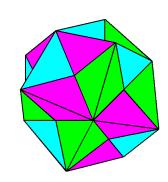
10. Add the next four modules of the third



11. The final four modules are added like this and will link into each other at the back to complete the design.

colour like this.

12



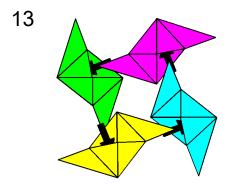
12. The three colour Stubby Star is finished.

3

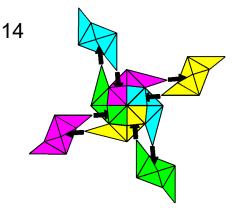
Alpha and Beta Sonobe and Corner-pocket Sonobe 12-part 8-point Stubby Stars

8

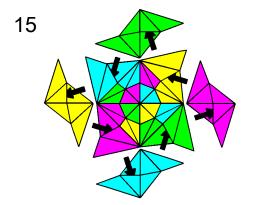
#### The four colour pattern version



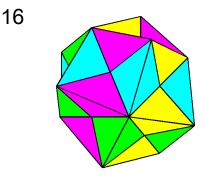
13. Begin by putting the first four modules, one of each colour, together like this.



14. Add the next four modules like this to create a ring of four pyramids.

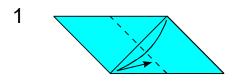


15. The final four modules are added like this and will link into each other at the back to complete the design.

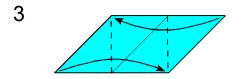


16. The four colour Stubby Star is finished. Because the 8-point Stubby Star is both a surface and method analogue of the 12-part cube all the four part colourings explained in the 12-part Cubes from Parallelogram Modules section of this site can also be applied to this design.

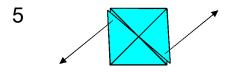
## From beta Sonobe modules



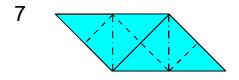
1. Fold the first module in half diagonally, corner to corner, then unfold.



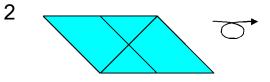
3. Fold the top left and bottom points inwards like this.



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

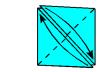


7. Use the folds you made in steps 1, 3 and 4 to collapse the module into shape.

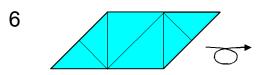


2. Turn over sideways.

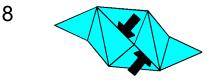
4



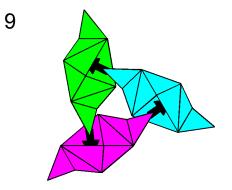
4. Fold both front flaps in half, upwards or downwards, as shown.



6. Turn over sideways.



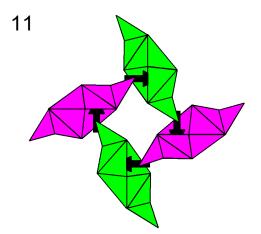
8. The finished module should look like this. The arrows indicate the location of the pockets. Make all 12 modules, either four in each of three contrasting but complementary colours or three in each of four colours, depending on which version you are intending to make.



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

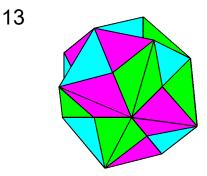
10

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



11. Four modules, two of each colour, go together like this to form an inside corner.

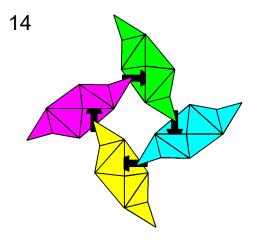
12. Four modules of the third colour are added to complete a ring of four pyramids.

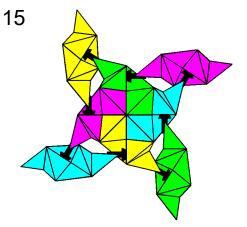


13. Continue adding modules, keeping to the same pattern of colours, until the design is complete.

The three colour pattern version

### The four colour pattern version



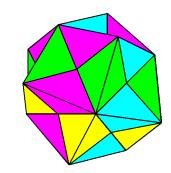


14. Four modules of four different colours go together like this to form an inside corner.

16

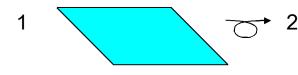
15. Add another four modules, again one of each colour, to complete a ring of four pyramids.

7

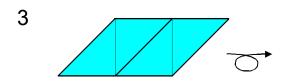


16. Continue adding modules, keeping to the pattern of colours shown, until the design is complete. Because the 8-point Stubby Star is both a surface and method analogue of the 12-part cube all the four part colourings explained in the 12-part Cubes from Parallelogram Modules section of this site can also be applied to this design.

# From alpha Corner-pocket Sonobe modules

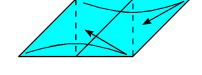


1. Begin by turning your first module over sideways.

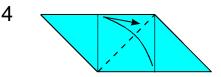


3. Turn over sideways.

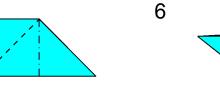
5



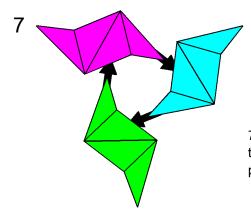
2. Fold the right and left points inwards as shown, then unfold.



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.



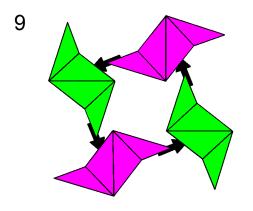


6. The finished module should look like this. The arrows indicate the location of the pockets. Make all 12 modules, either four in each of three contrasting but complementary colours or three in each of four colours, depending on which version you are intending to make.

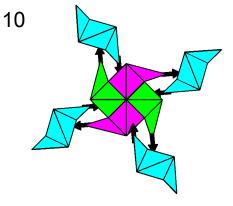
7. Put three modules of different colours together like this so that the top of the pyramid is pointing up towards you..

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

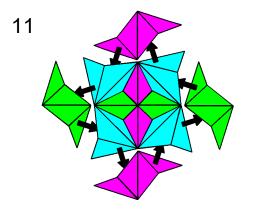
The three colour pattern version



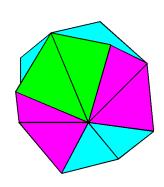
9. Begin by putting the first four modules, two modules of two colours, together like this.



10. Add the next four modules of the third colour like this.



11. The final four modules are added like this and will link into each other at the back to complete the design. 12



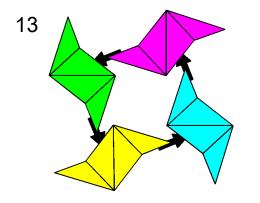
12. The finished three colour Stubby Star will look like this.

9

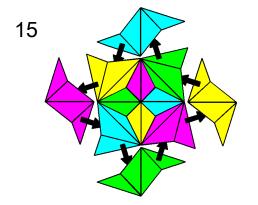
Alpha and Beta Sonobe and Corner-pocket Sonobe 12-part 8-point Stubby Stars

8

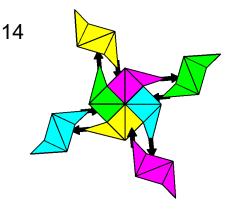
#### The four colour pattern version



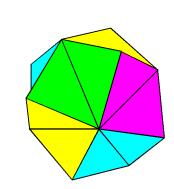
13. Begin by putting the first four modules, one of each colour, together like this.



15. The final four modules are added like this and will link into each other at the back to complete the design.



14. Add the next four modules of like this.



16. The finished four colour Stubby Star will look like this. Because the 8-point Stubby Star is both a surface and method analogue of the 12-part cube all the four part colourings explained in the 12-part Cubes from parallelogram modules section of this site can also be applied to this design.

16