Stargate and Nexus

Stargate is a stunningly beautiful macromodular sculpture made from five Artifact assemblies linked together with joining pieces. Nexus is made in a similar way but using twenty Artifact assemblies. You can find diagrams for Artifact elsewhere on the modular diagrams page of this site. Each Artifact assembly is made from six silver rectangles.

Stargate and Nexus were both designed in 1995.

Folding the joining pieces

You will need an additional fifteen silver rectangles for the joining pieces. Any kind of paper can be used. 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 into the centre, then unfold.
3. Turn over sideways.

4. Fold in half upwards, then unfold.

5. Fold in half corner to corner, then unfold.

6. Remake these folds simultaneously to collapse the paper into the form shown in picture 7.

7. This is the result. Remake the sloping right hand crease through all the layers as shown.

8. Fold the top edge of the right hand point onto the crease you have just remade in step 8.
9. Fold the front flap in half to the right.

10. Open out the folds made in steps 8 and 9.

11. Repeat step 8 on the bottom edge.

12. Repeat step 9 on the front flap.

13. Open out the folds made in steps 11 and 12.

14. The next diagram shows just the right hand flap, on a larger scale, and drawn from the viewpoint indicated.
15. Remake the two diagonal folds so that the point marked with a circle rises up towards you.

16. Pinch in a new crease then flatten gently.

17. Separate the layers and reverse the direction of these two short creases in the top layer only. The next move is difficult. It cannot be drawn in a single picture. Diagram 18 shows the fold that is made in the top layer. Diagram 19 shows the fold that is made in the rear layer. These folds must however be made at the same time. Take care you understand what you need to do before you do it and try to make sure

18. Remake fold 16 but making sure that the point marked by a circle moves away from you and swings round behind to the left between the layers. The dotted line shows where the flap ends up.

19. Remake fold 16 but making sure that the point marked by a circle moves towards you and swings to the right between the layers. The dotted line shows where the flap ends up.

David Mitchell / Stargate and Nexus
20. This is the result. The flap in the top layer has swung behind to the left. The flap in the rear layer has swung in front to the right. Both flaps now lie in between the layers. Fold both outer flaps backwards and crease firmly to lock the whole caboodle in place.

21. Your module should now look like this. Turn over sideways and repeat steps 15 through 20 on the other end of the module. The result should look like picture 22.

22. The Stargate joining piece module is finished. Make all 15.

### Assembling Stargate

23. Open out one of the sunken corners of the first Artifact assembly.

24. Insert one end of the joining module inside the Artifact assembly like this.
25. Turn the open corner inside out to lock the module in place.

26. The joining piece is now firmly linked to the Artifact assembly.

27. Join all five Artifact assemblies into a ring using five joining pieces like this.
28. Add five more joining pieces in the positions shown here.

29. Turn over sideways and repeat step 28 on the other side of the design.

28. Stargate is finished. Stargate makes an effective hanging ornament. To hang it simply open up one of the outside sunken corners and thread a knotted cotton thread up through the centre of the corner to the outside.
Assembling Nexus

Nexus is assembled in much the same way as Stargate but using twenty Artifact assemblies joined together by sixty joining pieces, the Artifact assemblies being arranged as if attached to the vertices of a platonic dodecahedron. However, in Nexus, each Artifact assembly is joined by just two, rather than three, joining pieces, both of which go on the outside of the design. As a result, in addition to its other aesthetic qualities, Nexus also possesses attractive interior space.