The Planar Tetrarhons Tetrahedron
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There are 28 Tetrarhons. They are a subset of the Polyrhons (Poly Rhombic Dodecahedra). In this case we are talking about all possible ways of connecting 4 Rhombic Dodecahedra. For this puzzle we will limit ourselves to the 14 Planar Tetrarhons (those that can lay flat in one layer either hexagonally or squarely). That set of 14 is pictured on the right side of this page. Note the total volume of this set is 56 units (4×14). Can this set form a size 6 Tetrahedron? The answer is YES!! See below…
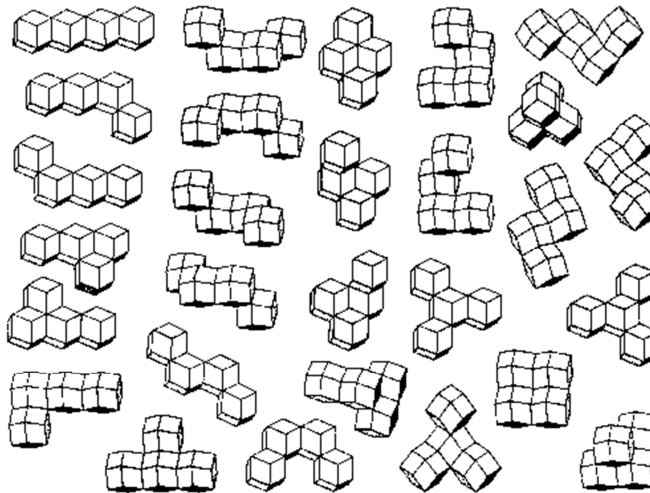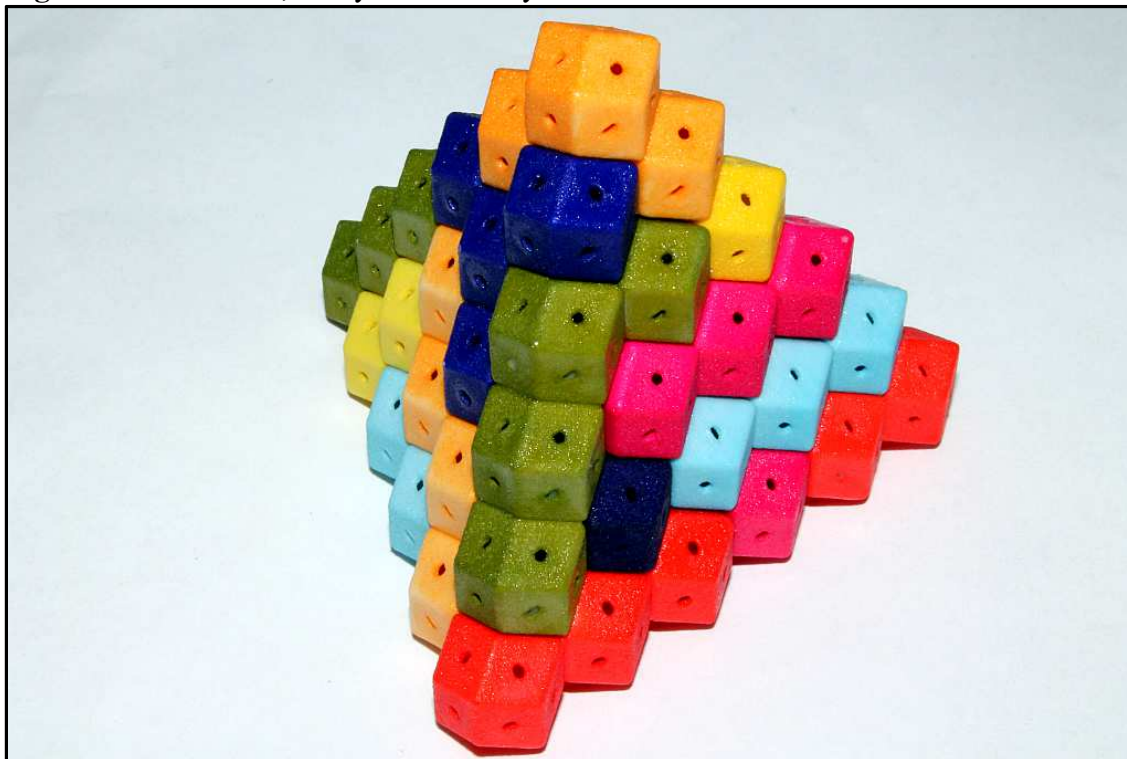
Can you find a solution?

Figure 1: The complete set of 28 Tetrarhons

Figure 2: A solution, likely one of many.

There are several sites that can show you how to make your own Rhombic Dodecahedra but you can also purchase this set of 14 Planar Tetrarhons from my Shapeways shop here:

http://www.shapeways.com/model/1774582/planar-tetrarhons.html

If you do and you attended G4G11, email me and I'll refund my markup on the first set you purchase.