

## Further Explorations

These modules can create elevations of many polyhedrons. The left column, “Polyhedron Name”, shows the outline of the shape’s edges created by A-unit modules. The following three middle columns gives details of the faces of the polyhedron from column 1. If the polyhedron only contains one type of polygonal face, the numbers are given in “# **Faces (1)**”. If the polyhedron contains two types of polygonal faces, the numbers are given in “# **Faces (1)**” and “# **Faces (2)**”, etc.

The Icosidodecahedron, Rhombicosidodecahedron, and Rhombicuboctahedron were included in the Art Exhibitions in Bridges 2022, Joint Math Meeting 2023, and Bridges 2023 (in order). Links to the pages for these sculptures are References [2], [3], and [4] in my paper.

**Table 1:** *Polyhedron names with the number of A-unit and B-unit modules needed.*

<b>Polyhedron Name (A-unit)</b>	<b># Faces (1)</b>	<b># Faces (2)</b>	<b># Faces (3)</b>	<b># A-Units</b>	<b># B-Units</b>
Tetrahedron	4 triangles			6	12
Octahedron	8 triangles			12	24
Cube	6 squares			12	24
Icosahedron	20 triangles			30	60
Dodecahedron	12 pentagons			30	60
Truncated Tetrahedron	4 triangles	4 hexagons		18	36
Cuboctahedron	8 triangles	6 squares		24	48
Truncated Cube	8 triangles	6 octagons		36	72
Truncated Octahedron	6 squares	8 hexagons		36	72
Rhombicuboctahedron	8 triangles	18 squares		48	96
Truncated Cuboctahedron	12 squares	8 hexagons	6 octagons	72	144
Snub Cube	6 squares	32 triangles		60	120
Icosidodecahedron	20 triangles	12 pentagons		60	120
Truncated Dodecahedron	20 triangles	12 decagons		90	180
Truncated Icosahedron	12 pentagons	20 hexagons		90	180
Rhombicosidodecahedron	20 triangles	30 squares	12 pentagons	120	240
Truncated Icosidodecahedron	30 squares	20 hexagons	12 decagons	180	360
Snub Dodecahedron	80 triangles	12 pentagons		150	300