

HGS Polyhedron Molecular Model

1004 Student Crystal Structure H Set

1006 Researcher Inorganic Chemistry D Set

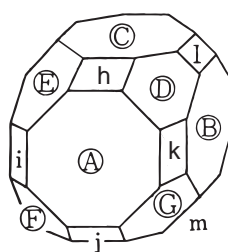
1014 Student Crystal Mini Set

These three models sets can represent ionic crystal structures such as rock salt, zinc blende, fluolite and perovskite, which have mainly cubic shapes.

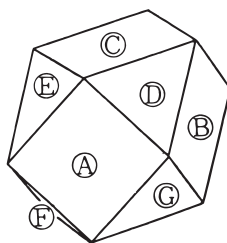
The 1006 Researcher Inorganic Chemistry D Set, 1004, Student Crystal Structure H Set and the 1014 Student Crystal Mini Set can be disassembled and reassembled with one another, to see all possible structures.

1 Polyhedra in HGS Polyhedron Molecular Model

1-1 The HGS polyhedron molecular model consists of four kinds of polyhedra : 14-,20-,26-and 32-hedra. Among them, 14- and 26-hedra are typical and their normal angles and shapes are shown below.



26-hedron



14-hedron

35° 16'	D- h	109° 28'	D- F
45°	A- h	120°	j - l
54° 44'	A- D	125° 16'	B- E
60°	h- i	144° 44'	E -m
70° 32'	D- E	180°	A-antipodal side
90°	A- B		D-antipodal side

F 1

1-2 The cube below can be assembled by connecting the eight #15 spheres (blue) with twelve #17 bonds. The shape below is formed when one sphere #17 (grey) is suspended diagonally through the cube by two bond #16 attached to two sphere #15 (blue).