MolecModels3D
Molecular Models

Molecular Model Student Kit
For Organic & Inorganic Chemistry - 1021009

Qty	Element	Colour	Holes	Angles & Type	Dia. mm	Item Number
6	Carbon	Black	4	109 Tetra	23	1021084
14	Hydrogen	White	1		17	1021060
1	Boron	Beige	3	120 Trigonal Planar	23	1021358
1	Nitrogen	Blue	3	107 Pyramidal	23	1021078
2	Nitrogen	Blue	4	109 Tetra	23	1021085
6	Oxygen	Red	2	105 Angular	23	1021071
1	Oxygen	Red	4	109 Tetra	23	1021088
1	Sulphur	Yellow	2	105 Angular	23	1021072
1	Sulphur	Yellow	6	90 Octahedral	23	1021102
1	Phosphorus	Purple	5	90 120 Tribipyr.	23	
1	Phosphorus	Purple	3	107 Pyramidal	23	
6	Halogen	Green	1		17	
2	Metal (Na)	Gray	1		20	
2	Metal (Ca,Mg)	Gray	2	105 Angular	23	
1	Metal (Be)	Gray	2	180 Linear	23	
1	Metal (Al)	Gray	3	120 Trigonal Planar	23	
1	Metal (Si,Cu)	Gray	4	109 Tetra	23	
1	Metal	Gray	6	90 Octahedral	23	
1	** sp3	Beige	4	109 Tetra	23	
1	** dsp3	Beige	5	90 120 Trigonal Bipy.	23	
1	** d2sp3	Beige	6	90 Octahedral	23	
3	Lone Pair Elecron Cloud			Flat Pear-Shaped		

Qty.	Links	Total Length	Item Number
20	Medium (Gray)	31mm	1021105
12	Long Flex. (Gray)	46mm	1021106
5	Medium (Purple)	31mm	1021104
1	Box (Gray)		1021114
1	Instruction Sheet		

- ** Atom - Parts
- Medium gray links are used for single covalent bonds as in water H-O-H
- Long gray links are used for double (as in oxygen) or triple bonds.
- Purple medium links are used for contrast.

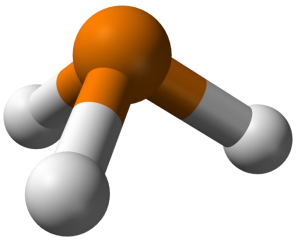
Introduction to Molecular Models

Model's atom parts can be used to make molecular models of water (H2O) Ammonia (NH3), Methane (CH4), Carbon Dioxide (CO2), Alcohol, Acids, and many other substances.

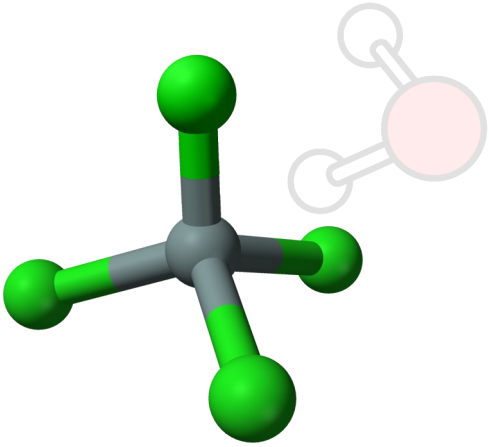
The system is easy to put together and take apart.

The System represents each atom of an element by a coloured ball. The number of holes indicates the valency of each atom.

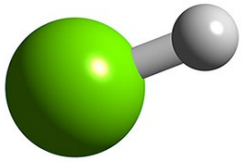
Please refer to an appropriate Chemistry textbook for more background theory.



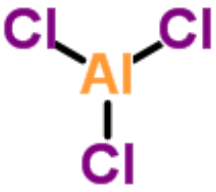
Phosphine (pyramidal)



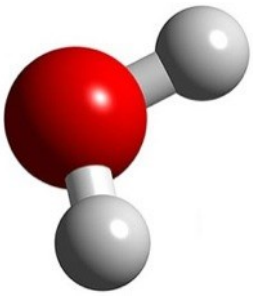
Silicon Tetrachloride



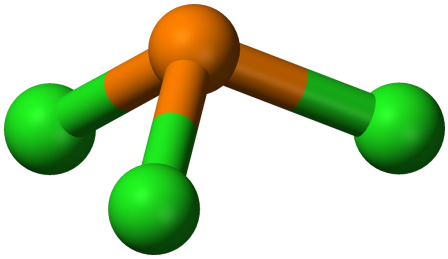
Hydrogen Chloride



Aluminium Chloride

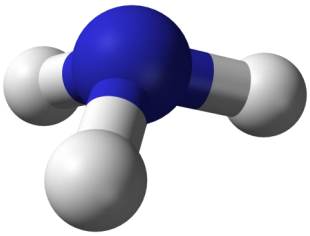


Water (Angular)

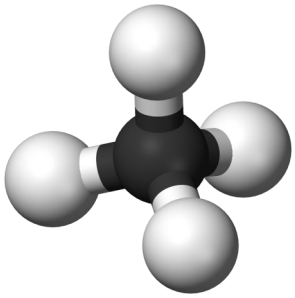


Phosphorus Trichloride

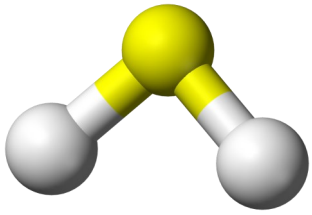
Hydrides



Ammonia (pyramidal)

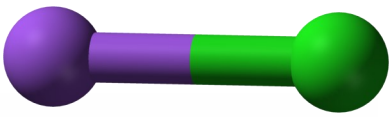


Methane (tetrahedral)



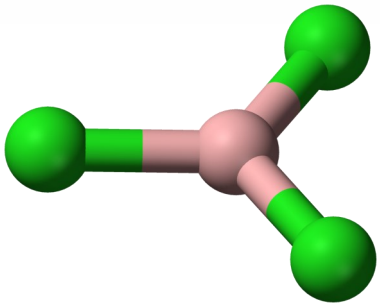
Hydrogen Sulphide

Halides, Chlorides & Fluorides

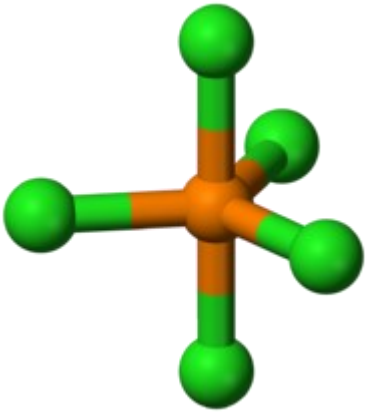


Sodium Chloride

Beryllium Chloride



Boron Trichloride

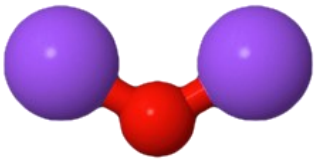


Phosphorus Pentachloride

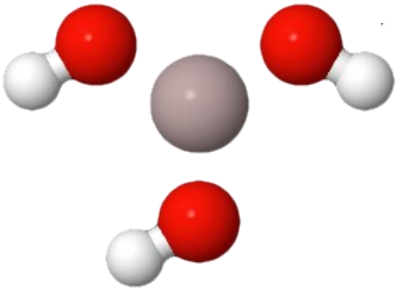
Sulphur Hexachloride

Colours shown may not be accurate.

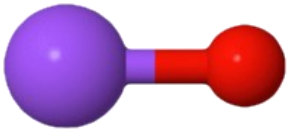
Metal Oxides & Hydroxides



Sodium Monoxide

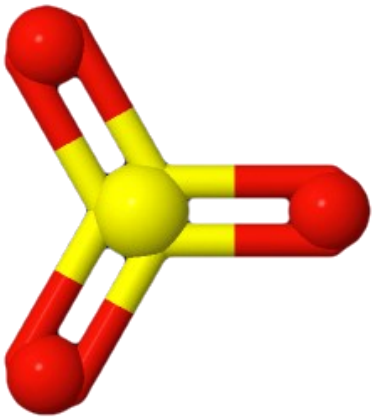


Aluminium Hydroxide

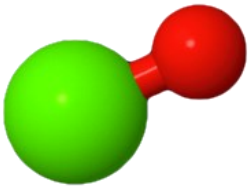


Sodium Hydroxide

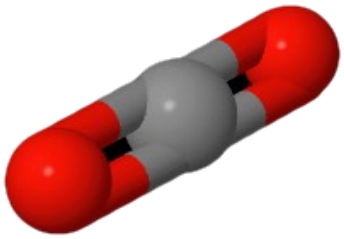
Non-Metal Oxide & Acids



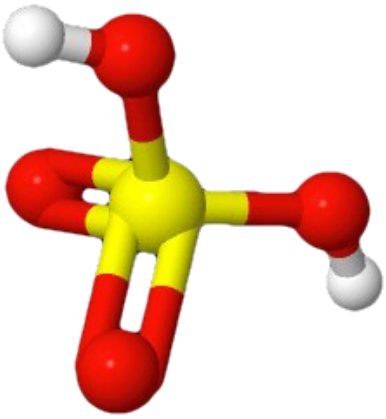
Sulphuric Trioxide



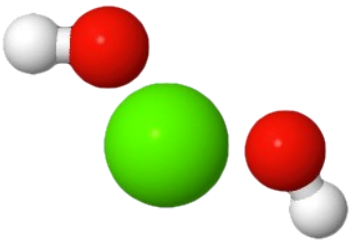
Calcium Oxide



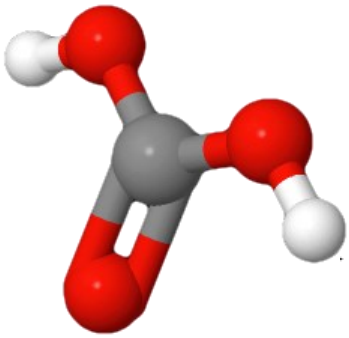
Carbon Dioxide



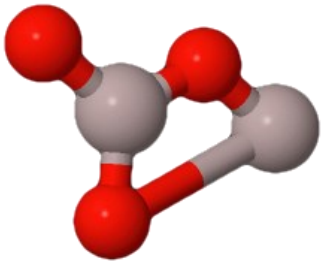
Sulphuric Acid



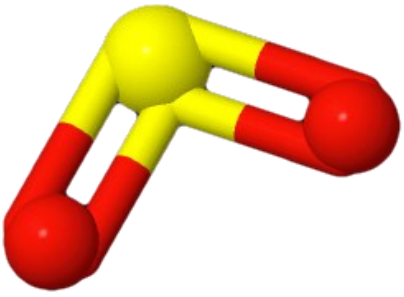
Calcium Hydroxide



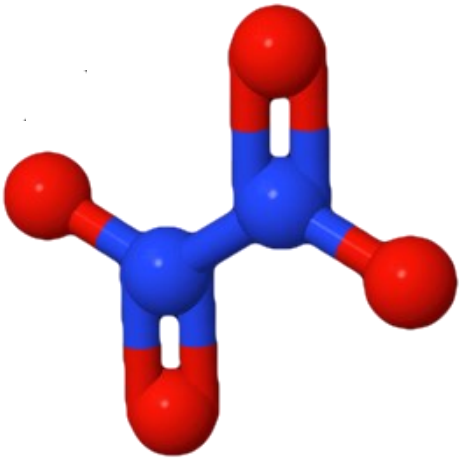
Carbonic Acid



Aluminium Oxide



Sulphur Dioxide



Dinitrogen Tetroxide

Colours shown may not be accurate.