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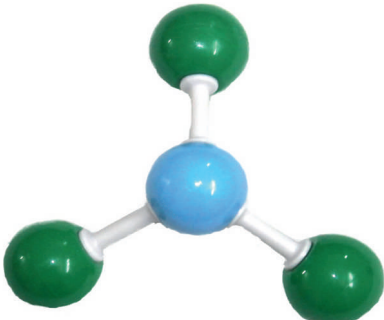

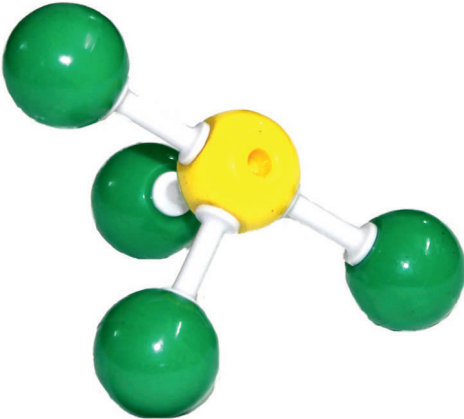
Organic And Inorganic Chemistry Molecular Model Kit

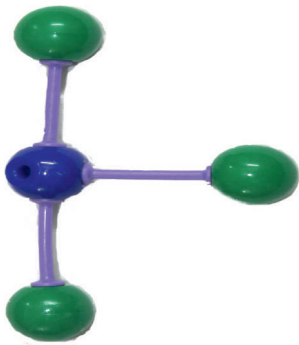

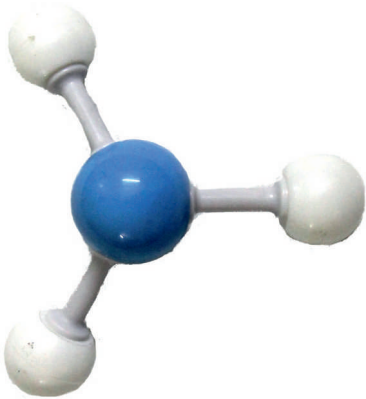
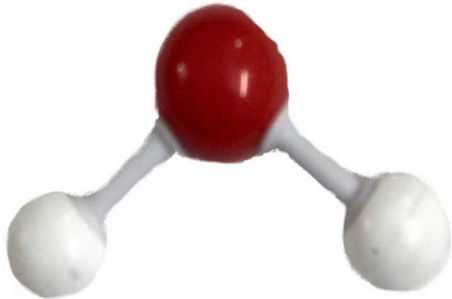


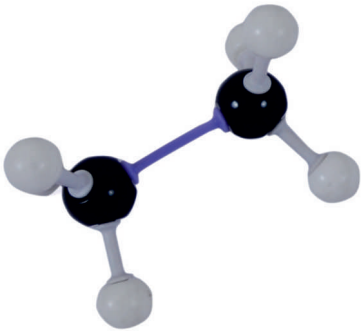
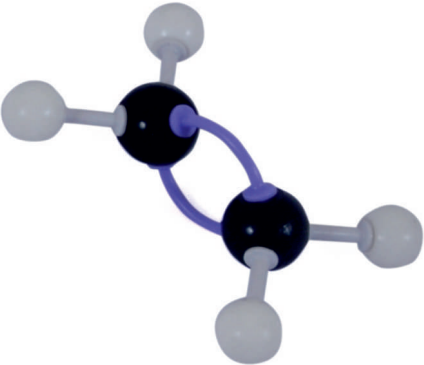

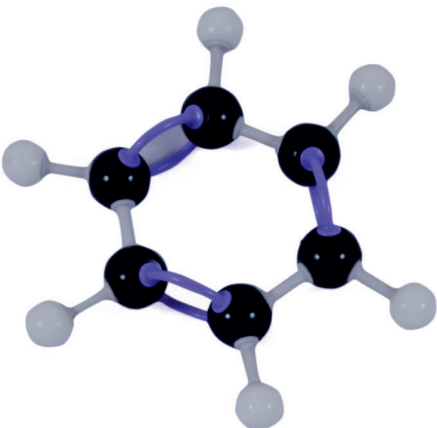
Step By Step Guide To Make Molecular Shapes

Atom		Hole (Bond)	Color	Use	Sample
H	H (Hydrogen)	1	White	For linking the atom by single bond.	
C	C (Carbon)	2(180°)	Black	For linking the atom to two other of atoms by two single bonds at an angle of 180 degree between them with sp hybridisation.	
C	C (Carbon)	3(120°)	Black	For linking the atom to other atoms by three single bonds at an angle of 120 degree.	
C	C (Carbon)	4(109°28')	Black	For linking the sp3 carbon atom to four other atoms to show tetrahedral geometry.	
O	O(Oxygen)	2(105°)	Red	For linking the atom to other atoms by two single bonds at an angle of 150 degree.	
N	N (Nitrogen)	3(107°)	Blue	For linking the atom to other atoms by three single bonds at an angle of 107 degree.	
S	S (Sulphur)	6(90°)	Yellow	For linking the atom with sp3d2 hybridised atom or d2sp3 hybridisation to six other atoms with octahedral geometry.	
Br	Br (Bromine)	1	Blue/Brown/Orange	For linking the atom by single bond.	
B	B (Boron)	1	Grey	For linking the atom by single bond.	
B	B (Boron)	2(105°)	Grey	For linking the atom to other atoms by two single bonds at an angle of 105 degree.	
B	B (Boron)	6(90°)	Grey	For linking the atom with sp3d2 hybridised atom or d2sp3 hybridisation to six other atoms with octahedral geometry.	
P	P (Phosphorus)	5(90°/120°)	Purple	For linking the sp3d hybridised atom to five other atoms to make triagonal bipyramidal structure.	
Br	Br (Bromine)	5(90°/120°)	Dark Blue	For linking the sp3d hybridised atom to five other atoms to make triagonal bipyramidal structure.	
I	I (Iodine)	5(90°/120°)	Dark Purple	For linking the sp3d hybridised atom to five other atoms to make triagonal bipyramidal structure.	
Bond Links			Color	Use	Sample
"S"	Single bond (Space filling)		Tranparent	For showing scale model	
"M"	Medium (Single Bond)		Grey White	For showing sigma bonds	
"L"	Long (Flexible, Double/triple bond)		Grey	For showing sigma bonds	
"V"	V-bond (Double bond)		Grey	For showing scale model	
"π"	Pie bond		Pink/Purple	For showing Pie bonds, ligands.	
"P"	Lone Pair		Cream/Purple	For showing lone pair of electrons	
"O"	Orbitals		Grey	For showing Orbitals	
Tool	Disconnecter Tool		Beige	For easy disassembly of your molecules	

B. Making Structures of Simple Molecules

<p>1.</p>	<p>Molecule : BeCl₂ (Beryllium Chloride), Shape : Linear</p> <p>Items required (i) Two Holes (180 deg) linear atom (Be)- 1 pc (ii) One Hole atom (Cl) - 2 pcs (iii) Small Bond - 2 pcs Q. How to make? Ans . BeCl₂ is a linear molecule. Take a two holes linear atom (Be) and attach two one-hole green atoms (Cl) to it with small bonds.</p>	
<p>2.</p>	<p>Molecule : AlCl₃ (Aluminium Chloride), Shape : Trigonal planar</p> <p>Items required (I) Three Hole atom (Al) - 1 pc (ii) One-hole atoms (Cl) - 3 pc (iii) Small Bond - 3 pc Q. How to make? Ans. Take a three hole atom (Al) and attach three one hole atoms (Cl) with the help of small bonds to its three holes in a plane.</p>	
<p>3.</p>	<p>Molecule : CH₄ (Methane), Shape : Tetrahedral</p> <p>Items required (I) Four Hole black atom (C) - 1 pc (ii) One Hole white atoms (H) - 4 pc (iii) Small Bond - 4 pc Q. How to make? Ans. Take the four hole black atom (C) and attach four one hole white atoms(H) with the help of small bonds to the black atom in a plane.</p>	
<p>4.</p>	<p>Molecule : SF₄ (Sulphur Tetrafluoride), Shape : Sea-Saw</p> <p>Items required (I) Six Hole atom (S) - 1pc (ii) One Hole atoms (F) - 4 pc (iii) Small Bond - 4 pc Q. How to make? Ans .Take the six hole atom(S) and attach four one hole atoms(F) to the four holes of (S) atom with small bonds. Keep the molecule on table. Out of the four (F) atoms only three would touch the table surface and the molecule can be moved like a sea-saw.</p>	

<p>5.</p>	<p>Molecule : BrF₃ (Bromine Trifluoride) Shape : T shaped</p> <p>Items required (I) Five Hole atom (Br) - 1pc (ii) One Hole atoms (F) - 3 pc (iii) Flexible Bond - 3 pc Q. How to make? Ans. Take the five hole atom (Br) and attach three one hole atoms (F) to the three holes of (Br) atom with flexible bonds.</p>	
<p>6.</p>	<p>Molecule : I₃ (Tricodide), Shape : Linear</p> <p>Items required (I) Two hole atom (I) - 1 pc (ii) Atoms (I) - 2 pc (iii) Flexible Bond - 2 pc Q. How to make? Ans. Take the two hole atom(I). Now attach two one-hole atoms (I) to the two I atom with Flexible bonds.</p>	
<p>7.</p>	<p>Molecule : NH₃ (Ammonia), Shape : Triagonal pyramidal</p> <p>Items required (I) Three hole atom (N) - 1pc (ii) One hole atom (H) - 3 pc (iii) Small bond - 3 pc Q. How to make? Ans. Take the three hole atom (N) and attach three one hole atoms (H) with small bonds to it.</p>	
<p>8.</p>	<p>Molecule : H₂O (Water), Shape : Bent</p> <p>Items required (I) Two hole atom (O) - 1 pc (ii) One hole atoms(H) - 2 pc (iii) Small bond - 2 pc Q. How to make? Ans. Take the two hole atom (O) and attach two one hole atoms (H) with small bond. It will make an angle of 104.5 degree.</p>	

<p>9.</p>	<p>Ethane, C_2H_6 Items required (i) Four Holes black atoms (C) - 2 pc (ii) One Hole white atoms (H) - 6 pc (iii) Small Bond- 6 pc (iv) Flexible Bond - 1 pc Q.How to make? Ans. Connect two black atoms by a small Bond. Now connect white atom (H) to each free hole of 1 C atoms. The two carbon atoms connected with Flexible bond.</p>	
<p>10.</p>	<p>Ethene, C_2H_4 Items required (i) Four Holes black atoms (C) - 2 pc (ii) One Hole white atoms (H) - 4 pc (iii) Small Bond - 4 pc (iv) Flexible Bond - 2 pc Q. How to make? Ans. Attach two carbon atoms with two flexible bonds. Then connect one hole white atoms (H) to each (C) on the remaining two hole which are in the same plane as the ones interconnecting the two Carbon atoms.</p>	
<p>11.</p>	<p>Ethyne, C_2H_2 Items required (i) Four Holes black atoms (C) - 2 pc (ii) One Hole white atoms (H) - 2 pc (iii) Small Bond - 2 pc (iv) Flexible Bond - 3 pc Q. How to make? Ans . Link two black atoms (C) by three flexible bonds. Now connect one white atom (H) to each of the (C) atoms such that all the four atoms are in straight line. These bonds represent the sigma bond in the ethyne molecule.</p>	
<p>12.</p>	<p>Benzene, C_6H_6 Items required (i) Four Holes black atoms (C) - 6 pc (ii) One Hole white atoms (H) - 6 pc (iii) Flexible Bond - 6 pc (iv) Small Bond - 9 pc Q. How to make? Ans. Each of the five holes black (C) atom has three holes in one plane and two in perpendicularly upward and downward direction. Make the six membered ring by linking. The six (C) atom using two of the three holes in the same plane. Connect one one-hole white (H) atom to each of these on the third hole. This would make the basic sigma bond skeleton of Benzene molecule.</p>	


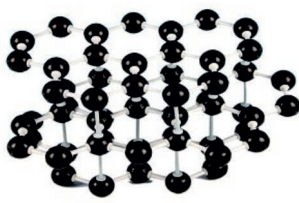
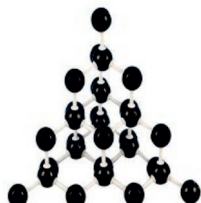
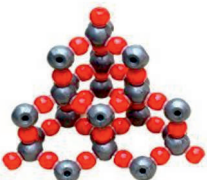
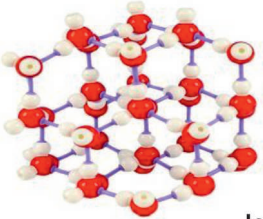
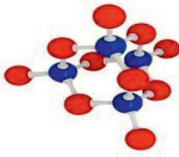
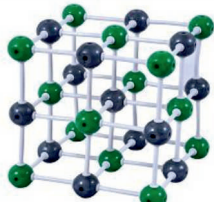
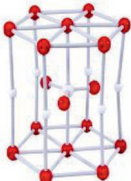
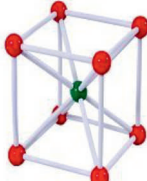
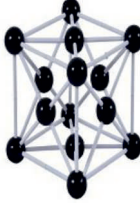
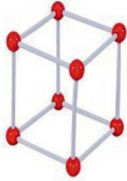
Our Goal and Mission Brief

The Edunovate molecular models are very useful for students to understand molecular structures, overlapping of orbitals, shape of molecule, bond angles, stereo-isomerism. Student understand topic in a better way in comparison to conventional way of understanding a topic. It helps in Visualisation of topics that required 3D Imagination. Chemistry Molecular Models increase problem solving skill and helps in finding solution fast and effectively. Therefore, the Edunovate Chemistry model is one of the best molecular models and excellent for use by students and researchers.

Safety Guidelines:

1. Do not put the parts into orifices such as mouths, nostrils, ears, etc.
2. Keep the parts away from small children.
3. Do not give the parts to small children as misuse could result in permanent injury to the child.
4. Do not use the parts near fire, flame, or hot surfaces.
5. Recycle the plastic rather than dispose of it in the garbage.
6. Protect our environment; do not throw the kit and its parts into a river, sea or body of water.

Our Products

 Organic Inorganic Molecular Model Teacher Set		 Graphite	 Diamond
 Silica	 Ice	 P4O10	 Sodium Chloride NaCl
 Hexagonal Closed Packing	 Body Centred Cell	 Face Centred Cell	 Simple Cubic Cell

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