



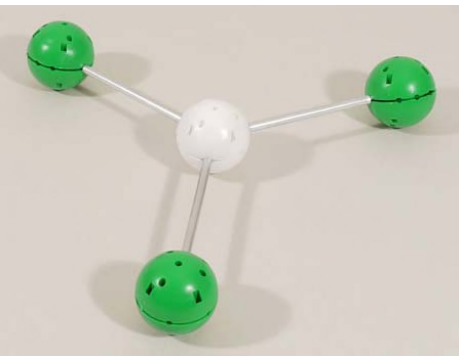
Unit™ molecular building system


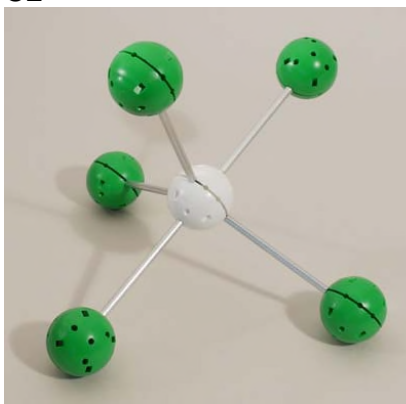

・組み立て例



Unitサイズの分子構造模型の組み立て方について、いくつかの例を挙げています。
下記の図を参考にして下さい。

A. Methane (Tetrahedral / sp^3) メタン (四面体分子構造)		A1	A5
		 x1 (black)	
A2	A3	A4	
 x1 (black)	 x4	 x4	

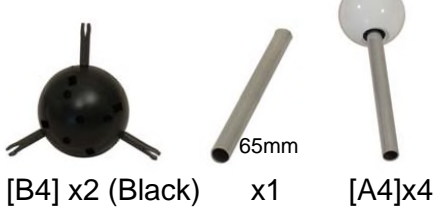
B. Boron trichloride (Trigonal planar / sp^2) / 三塩化ほう素 (平面三角形分子構造)				
<p>コインなど平らなものをご用意下さい。(セットには含まれておりません。)</p>				
B1	B2	B3		

<p>B4</p> 	<p>B5</p>  <p>x3</p>	<p>B6</p> 
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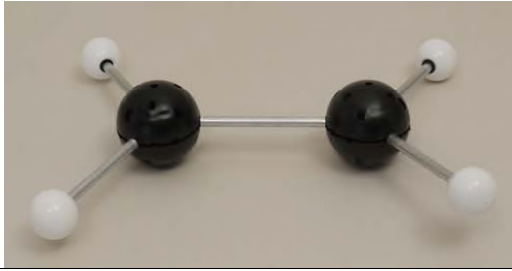
<p>C. Phosphorous pentachloride 五塩化りん (Trigonal bipyramid / dsp^3) (三方両錐体分子構造)</p>  <p>[B4]x1 [B5]x5 x2 83mm x5</p>	<p>C2</p> 
<p>C1</p> 	

<p>D. Ethene (Double bond - visual) エチレン (二重結合分子構造)</p>  <p>[A2]x2 (black) 90mm x2 [A4] x4</p>	<p>D1</p> 
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E. Ethene (Double bond - 120°)
エチレン (二重結合分子構造) - 120°



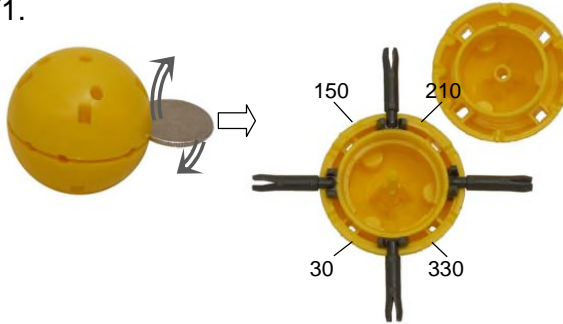
E1



F. Octahedral (d^2sp^3) geometry
八面体形分子構造



F1.



F2.



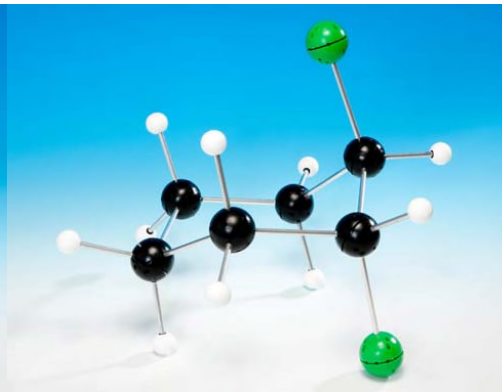
F3.



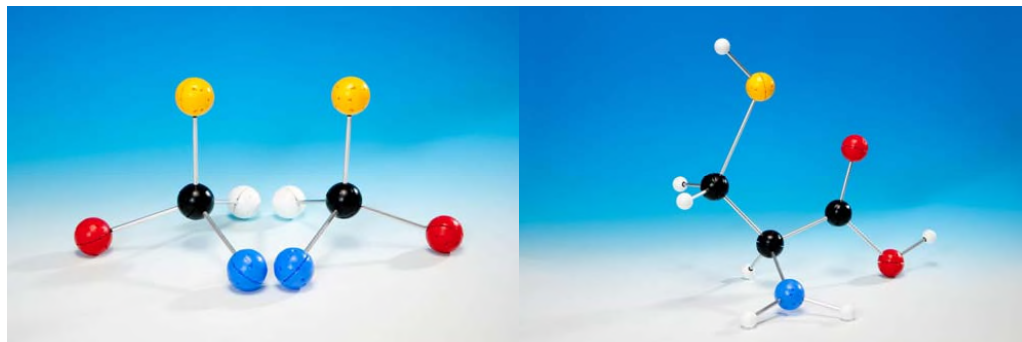
Example Models in the Unit system



Ethanoic acid
酢酸



Trans-1,2-dichlorocyclohexane
トランス-1, 2-ジクロロシクロヘキサ



Chirality / Optical isomerism
キラリティ / 光学異性体

Cysteine (A chiral molecule)
システイン (キラル分子)

Bond Lengths for Organic and Inorganic Chemistry Models

Bond	Inter-nuclear distance		Unit sphere radii to subtract	Tube length at 85mm per 100pm	Suggested tube to use
	Approx.	At 85 mm per 100pm:			
C-H N-H O-H	102 pm	87 mm	22mm	65mm	65 mm (short tube)
C-C C-N C-O	150 pm	127 mm	44mm	83mm	83 mm (medium tube)
S-S O- -H(O)	200 pm	170 mm	44mm	126mm	125 mm (long tube)
C=C C=O C=N	130 pm	111 mm	44mm	67mm	65mm (short tube) OR 2x 90mm flexible tube

Extra-long tubes are also available. You can also make your models to larger scales by substituting short, medium & long tubes for medium, long & extra-long tubes.

予備部品について :

パーツごとの購入が可能です。詳細についてはinfo@oviss.co.jpまでお問合せ下さい。



Grove Farm Barns, High Street, Shipton Under Wychwood,
Chipping Norton, OX7 6DG, UK

Web: www.cochranes.co.uk

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