

Drawing Covalent Molecules

1) Hydrogen & Hydrogen

Family	1 2 3 4 5 6 7 8	Dot Diagram (•)	Family	1 2 3 4 5 6 7 8	Dot Diagram (x)
Valence Electrons	_____	1 2 7 H 3 8 4 6 5	Valence Electrons	_____	1 2 7 H 3 8 4 6 5
Number of Bonds	_____		Number of Bonds	_____	
Number of atoms needed	_____		Number of atoms needed	_____	

Circle Bond Type for the diagram - = ≡

Electrons you may need Dot Diagram Molecule Electrons you may need

1 2 3 4 5 6 7 8 Drag and drop the Bond Type 1 2 3 4 5 6 7 8

Molecule Line Drawing

single	double	triple
1 =	1 = 2 =	1 = 2 = 3 =
2 =		

H D H

1 2 1 2
5 H D H 5
6 4 3 6 4 3

Name of compound: _____

2) Hydrogen & Chlorine

Family	1 2 3 4 5 6 7 8	Dot Diagram (•)	Family	1 2 3 4 5 6 7 8	Dot Diagram (x)
Valence Electrons	_____	1 2 7 H 3 8 4 6 5	Valence Electrons	_____	1 2 7 Cl 3 8 4 6 5
Number of Bonds	_____		Number of Bonds	_____	
Number of atoms needed	_____		Number of atoms needed	_____	

Circle Bond Type for the diagram - = ≡

Electrons you may need Dot Diagram Molecule Electrons you may need

1 2 3 4 5 6 7 8 Drag and drop the Bond Type 1 2 3 4 5 6 7 8

Molecule Line Drawing

single	double	triple
1 =	1 = 2 =	1 = 2 = 3 =
2 =		

H D Cl

1 2 1 2
5 H D Cl 5
6 4 3 6 4 3

Name of compound: _____

3) Oxygen & Oxygen

Family	1 2 3 4 5 6 7 8	Dot Diagram (•)	Family	1 2 3 4 5 6 7 8	Dot Diagram (x)
Valence Electrons	_____	1 2 7 O 3 8 4 6 5	Valence Electrons	_____	1 2 7 O 3 8 4 6 5
Number of Bonds	_____		Number of Bonds	_____	
Number of atoms needed	_____		Number of atoms needed	_____	

Circle Bond Type for the diagram - = ≡

Electrons you may need Dot Diagram Molecule Electrons you may need

1 2 3 4 5 6 7 8 Drag and drop the Bond Type 1 2 3 4 5 6 7 8

Molecule Line Drawing

single	double	triple
1 =	1 = 2 =	1 = 2 = 3 =
2 =		

O D O

1 2 1 2
5 O D O 5
6 4 3 6 4 3

Name of compound: _____