

Name: _____ Date: _____

CHEMISTRY

Covalent Compounds and Electrons

In the first column type the number of atoms in the covalent compound. In the second column, type the total number of VALENCE electrons in the compound (all electrons: shared and unshared electrons). In the third column, determine the total number of possible chemical bonds in the compound.

Compound	Number of Atoms	Total Valence Electrons	Total possible of chemical bonds
H ₂			
Cl ₂			
O ₂			
N ₂			
H ₂ O			
SF ₂			
CH ₄			
NH ₃			
PF ₃			
CCl ₄			
C ₂ H ₆			

Compound	Number of Atoms	Total Valence Electrons	Total possible of chemical bonds
C₂H₄			
C₂H₂			
CH₃OH			
CH₂O			
CH₃CO₂H			

Total possible chemical bonds: Total number of unpaired valence electrons of the individual atoms divided by 2.