

Exercise on Covalent Bonding

Draw Lewis Dot Diagrams of the atoms, State how many electrons each atom needs, draw extra atoms where necessary to account for the composition of the covalent compounds, draw a Lewis Dot Diagram of the resulting covalent compound and finally, state how many electrons are shared in each bond and whether the bond is single, double or triple.

F F

Cl Cl

O O

N N

H H

(All of the above covalent compounds exist as gases at room temperature. Since each gas contains two atoms, they are referred to as diatomic gases. This is the naturally occurring state of each of these elements.)

N Cl

C O

H O

H Cl

C H