

Covalent Bond Practice

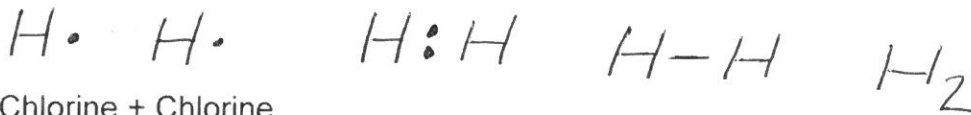
1. Fill in the missing information on the chart.

Element	# of Protons	# of Electrons	# of Valence Electrons	# of electrons to fill outer shell.
Carbon	6	6	4	4
Hydrogen	1	1	1	1
Chlorine	17	17	7	1
Helium	2	2	2	0
Phosphorus	15	15	5	3
Oxygen	8	8	6	2
Sulfur	16	16	6	2
Nitrogen	7	7	5	3

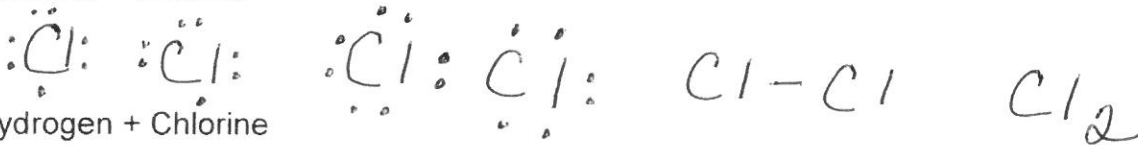
2. For each of the following covalent bonds:

- Write the symbols for each element.
- Draw a Lewis Dot structure for the valence shell of each element.
- Rearrange the electrons to pair up electrons from each atom.
- Draw circles to show the sharing of electrons between each pair of atoms
- Draw the bond structure using chemical symbols and lines. Use one line for each pair of electrons that is shared.
- Write the chemical formula for each molecule.

a) Hydrogen + Hydrogen



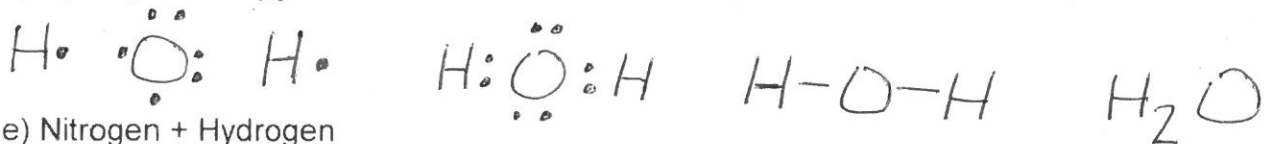
b) Chlorine + Chlorine



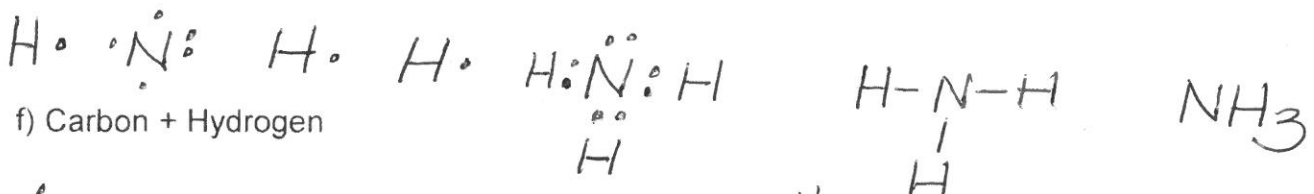
c) Hydrogen + Chlorine



d) Hydrogen + Oxygen



e) Nitrogen + Hydrogen



f) Carbon + Hydrogen

