

Name: Key

Block: \_\_\_\_\_

Date: \_\_\_\_\_

Chemistry 11

**Lewis Diagrams / Bonding Worksheet**

Assignment

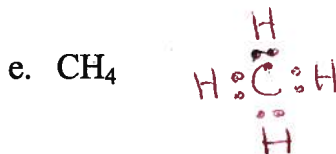
1. Draw electron dot diagrams for the following atoms:

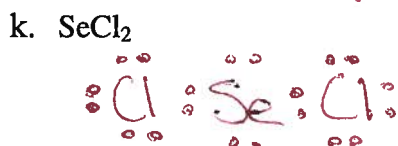
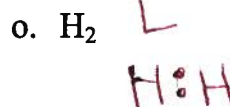
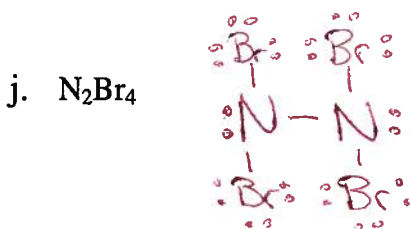
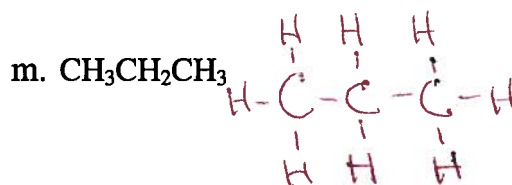


2. Draw electron dot diagrams for the following ions:



3. Draw Lewis structures for the following compounds:





4. For each of the following pairs of atoms, give the electronegativity difference and classify each of the bonds as ionic, covalent or polar covalent.

Atoms	Electronegativity Difference	Classification
C-Cl	$3 - 2.5 = 0.5$	polar covalent
C-O	$3.5 - 2.5 = 1.0$	polar covalent
Na-Cl	$3.0 - 0.9 = 2.1$	ionic
H-O	$3.5 - 2.1 = 1.4$	polar covalent
O-O	$3.5 - 3.5 = 0$	covalent
Pb-I	$2.5 - 1.9 = 0.6$	polar covalent
Ca-F	$4.0 - 1.0 = 3.0$	ionic
N-H	$3.0 - 2.1 = 0.9$	polar covalent
Mg-Br	$2.8 - 1.2 = 1.6$	ionic (metal + non-metal)
Mn-O	$3.5 - 1.5 = 2.0$	ionic