Lewis Structures Day 2

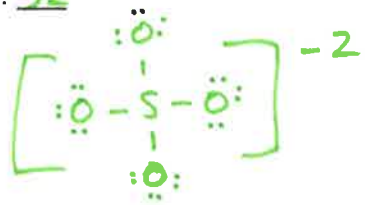
Name: KEY p. _____

Random adj: Corny

Count up the valence electrons present (look at charge) and then draw the correct Lewis structures for the following ions.

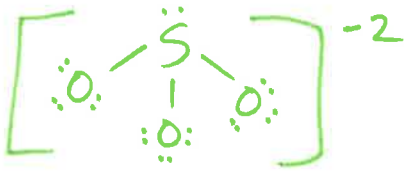
1) SO_4^{-2} Name: Sulfate

VE: 32



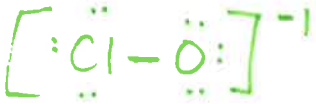
2) SO_3^{-2} Name: Sulfite

VE: 26



3) ClO^{-1} Name: hypochlorite

VE: 14

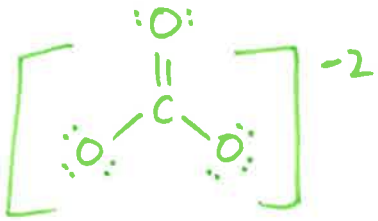


4) CN^{-1} Name: cyanide

VE: 10

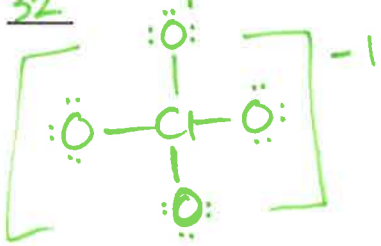
5) CO_3^{-2} Name: Carbonate

VE: 24



6) ClO_4^{-1} Name: perchlorate

VE: 32



7) Identify the type of bond described for each of the following as: ionic (I), polar covalent (PC), nonpolar covalent (NPC) or metallic (M):

PC a) The C-O bonds in CO_2

NPC b) The C-C bonds in C_3H_8

M c) The bonds in Ba

NPC d) The bonds in F_2

I e) The bonds in K_2O

PC f) The H-O bonds in H_2O

8) You can only draw Lewis structures for this type of bonding: Covalent

9) Which of the following bonds would be the **least polar** bond?

H - C	N - O	I - F	O - S
0.4	.5	1.5	1.0

10) Write formulas for each of these ionic substances:

a) ammonium hydroxide NH_4OH

b) lithium carbonate Li_2CO_3

c) sodium hypochlorite $NaClO$

d) barium sulfite $BaSO_3$