

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: _____
VE: _____

2) SO_3^{-2} Name: _____
VE: _____

3) ClO^{-1} Name: _____
VE: _____

4) CN^{-1} Name: _____
VE: _____

5) CO_3^{-2} Name: _____
VE: _____

6) ClO_4^{-1} Name: _____
VE: _____

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

_____ a) The C-O bonds in CO_2

_____ b) The C-C bonds in C_3H_8

_____ c) The bonds in Ba

_____ d) The bonds in F_2

_____ e) The bonds in K_2O

_____ f) The H-O bonds in H_2O

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

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

H - C

N - O

I - F

O - S

10) Write formulas for each of these ionic substances:

a) ammonium hydroxide _____

b) lithium carbonate _____

c) sodium hypochlorite _____

d) barium sulfite _____