

Name:  
Date:  
Hour:

CALVIN

Chemistry ~ Ch.7 Review

1) Give names for the following:

- a)  $\text{Mg}(\text{MnO}_4)_2$  Magnesium Permanganate  
b)  $\text{Ca}(\text{CO}_3)$  Calcium Carbonate  
c)  $\text{Cu}(\text{NO}_3)_4$  Copper(IV) Nitrate  
d)  $\text{Na}_3\text{P}$  Sodium Phosphide  
e)  $\text{CO}_2$  Carbon dioxide  
f)  $\text{B}_2(\text{SO}_3)_3$  Boron Sulfite  
g)  $\text{CaCl}_2$  Calcium Chloride  
h)  $\text{Ag}(\text{NO}_3)$  Silver Nitrate  
i)  $\text{AlCl}_3$  Aluminum Chloride  
j)  $\text{K}_2(\text{CO}_3)$  Potassium Carbonate

2) Write formulas for:

- a) Iron (IV) Oxide  $\text{Fe}^{+4} \text{O}^{-2}$   $\boxed{\text{FeO}_2}$   
b) Calcium Cyanide  $\text{Ca}^{+2} (\text{CN})^{-1}$   $\boxed{\text{Ca}(\text{CN})_2}$   
c) Strontium Fluoride  $\text{Sr}^{+2} \text{F}^{-1}$   $\boxed{\text{SrF}_2}$   
d) Magnesium Nitride  $\text{Mg}^{+2} \text{N}^{-3}$   $\boxed{\text{Mg}_3\text{N}_2}$   
e) Aluminum Sulfate  $\text{Al}^{+3} (\text{SO}_4)^{-2}$   $\boxed{\text{Al}_2(\text{SO}_4)_3}$   
f) Sodium Phosphate  $\text{Na}^{+1} (\text{PO}_4)^{-3}$   $\boxed{\text{Na}_3(\text{PO}_4)}$   
g) Cobalt (II) Iodide  $\text{Co}^{+2} \text{I}^{-1}$   $\boxed{\text{CoI}_2}$   
h) Barium Carbonate  $\text{Ba}^{+2} \text{CO}_3^{-2}$   $\boxed{\text{Ba}(\text{CO}_3)}$   
i) Barium Chloride  $\text{Ba}^{+2} \text{Cl}^{-1}$   $\boxed{\text{BaCl}_2}$   
j) Hydrogen Nitrate  $\text{H}^{+1} \text{NO}_3^{-1}$   $\boxed{\text{H}(\text{NO}_3)}$   
k) Potassium Sulfide  $\text{K}^{+1} \text{S}^{-2}$   $\boxed{\text{K}_2\text{S}}$   
l) Lithium Sulfide  $\text{Li}^{+1} \text{S}^{-2}$   $\boxed{\text{Li}_2\text{S}}$

3) Give Name, Symbol, and Charge for:

- a) Nitrate  $\text{NO}_3^{-1}$   
b) Nitrite  $\text{NO}_2^{-1}$   
c) Nitride  $\text{N}^{-3}$

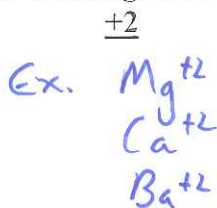
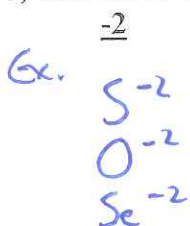
4) Give Name, Symbol, and Charge for:

- a) Sulfide  $\text{S}^{-2}$   
b) Sulfite  $\text{SO}_3^{-2}$   
c) Sulfate  $\text{SO}_4^{-2}$

5) Bromine gains 1 electrons to achieve noble gas status.

6) Bromine would have a -1 charge.

7) List three elements with a -2 charge and ONE element with a +2 charge



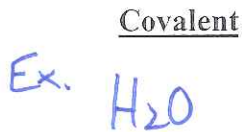
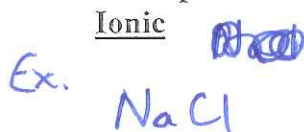
8) Give the formula (symbol and charge) for the ion formed by Bismuth.



9) What is the electron configuration for:

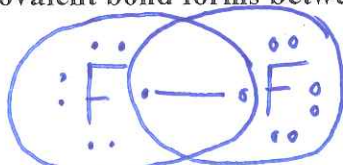


10) List two elements that might form an ionic compound and two that might form a covalent compound:



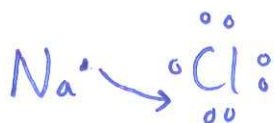
11) Use Lewis dot diagrams and a sentence or two to fully explain HOW:

a) a covalent bond forms between two Fluorine atoms



Share electrons to form octet

b) an ionic bond forms between Sodium and Chlorine



opposites attract

12) How many valence electrons and what is the charge for the ion:

<u>Element</u>	<u>Valence</u>	<u>Charge</u>
a) Boron	<u>3</u>	<u>+3</u>
b) Calcium	<u>2</u>	<u>+2</u>
c) Bromide	<u>7</u>	<u>-1</u>
d) Argon	<u>8</u>	<u>0</u>

GO VIKINGS?