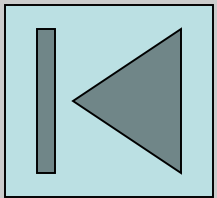


**9.1****9.2****9.3****9.4****9.5 etc..**5555510101010101515151515202020202025252525253030303030353535353540404040404545454545

9.1

5 pts.

This is the correct name & charge  
for the Ca ion & F ion.

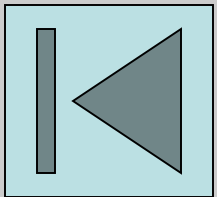


What is Calcium  $^{2+}$  & Fluoride  $^{1-}$ ?

9.1

10 pts.

These are the correct symbols  
(w/charges) of the Aluminum,  
Zinc, Nitrogen, and Sulfide ions,  
respectively.

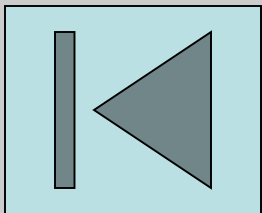


What is  $\text{Al}^{3+}$ ,  $\text{Zn}^{2+}$ ,  $\text{N}^{3-}$ , &  $\text{S}^{2-}$ ?

9.1

15 pts.

These types of ions have names ending in *-ide*.

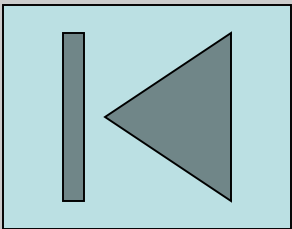


What are ANIONS ?

9.1

20 pts.

When Group 1A & 2A elements form ions, they have positive charge and are called this.



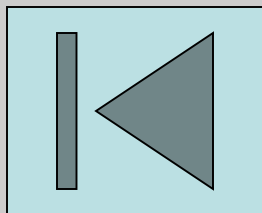
What are CATIONS?

9.1

25 pts.

When naming a transition metal ion that can have more than one common ionic charge, the numerical value of the charge is indicated by this.

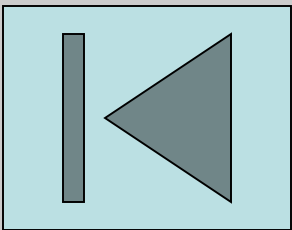
What is a Roman Numeral?



9.1

30 pts.

The ions formed by nonmetals in Groups 6A and 7A have a numerical charge that is found by subtracting the group number from this.

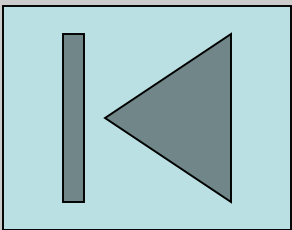


What is 8?

9.1

35 pts.

This type of element loses its valence electrons when it forms a compound.



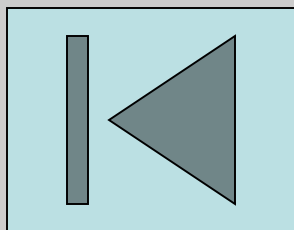
What is a metal?



9.1

40 pts.

The Stock name for chromic ion is this.

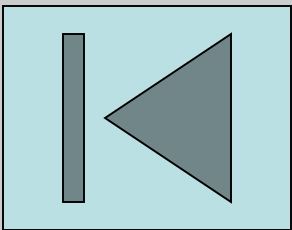


What is the chromium(III) ion?

9.1

45 pts.

According to classical naming system, the names of the  $\text{Fe}^{2+}$  ion, &  $\text{Fe}^{3+}$  ions are respectively these?

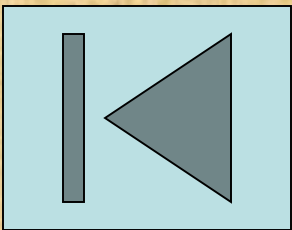


What are the Ferrous and Ferric ion?

9.2

5 pts.

**This is the correct formula  
for Manganese Sulfide.**

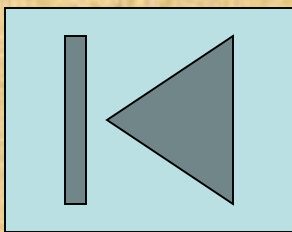


What is Mn<sub>2</sub>S<sub>3</sub>?

9.2

10 pts.

Give the names of two types of ions, ***in the order they are written***, that always make up binary ionic compounds.

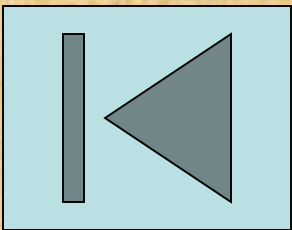


What are Cations and Anions?

9.2

15 pts.

Ionic compounds are  
composed of \_\_\_\_\_ and  
nonmetals

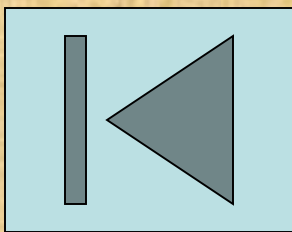
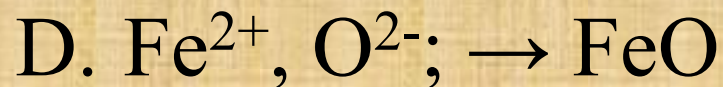
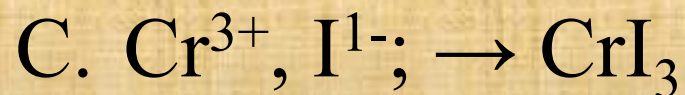
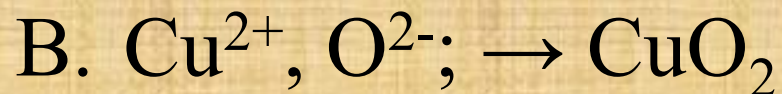
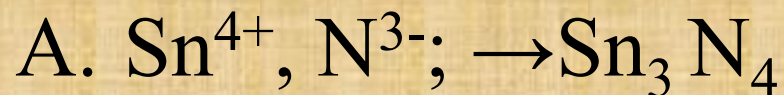


What are metals?

9.2

20 pts.

Of the following list, this answer is the **incorrect** chemical formula for the ions listed

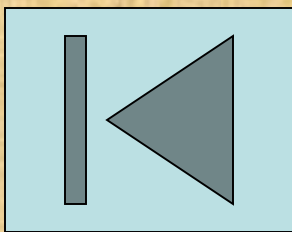


What is B?

9.2

25 pts.

Polyatomic ions usually have  
–ite or –ate at end of their  
name and always contain  
this element as part of  
their formula.

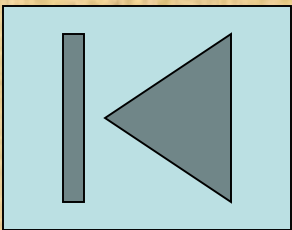


What is oxygen?

9.2

30 pts.

**Group 1A metals will combine in a 1:1 ratio with the elements in this group to form ionic compounds**



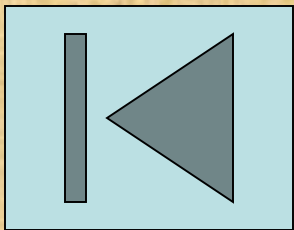
What are the Halogens  
(Group 7A)?



9.2

35 pts.

This are the correct formulas  
of Cobaltous Chloride and  
Stannic Fluoride.

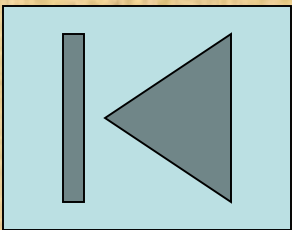


What are  $\text{CoCl}_2$  and  $\text{SnF}_4$ ?

9.2

40 pts.

This is the type of compound  
that  $\text{CuSO}_4$  forms.



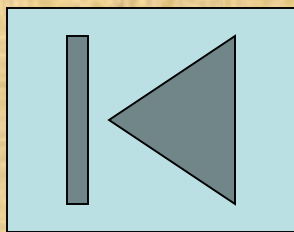
What is polyatomic ionic?

9.2

45 pts.

Name 3 polyatomic ions that form a neutral compound when combined with a group 1A monatomic ion in a 1:1 ratio?

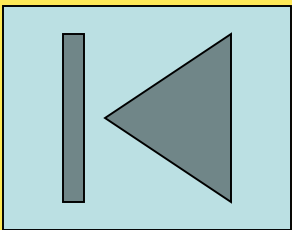
What is Acetate, Chlorate, Nitrate, Iodate, Chlorite, Nitrite?



9.3

5 pts.

This is the suffix added to the second element for the names of all binary compounds, both ionic and molecular?

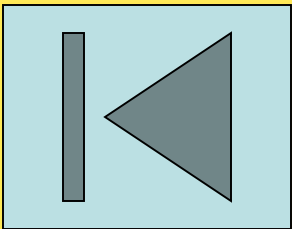


What is -ide?

9.3

10 pts.

Binary molecular compounds are made of these types of elements.

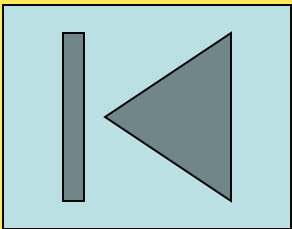


What are nonmetals?

9.3

15 pts.

In naming a binary molecular compound, the number of atoms of each element present in the molecule is indicated by these.



What are prefixes?

9.3

20 pts.

**These are the 2 formulas that  
represent molecular compound  
listed below:**

ZnO

MgS

Xe

PCl<sub>5</sub>

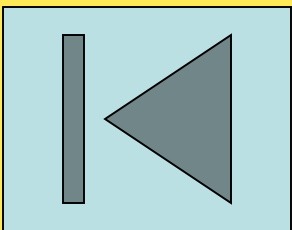
BeHCO<sub>3</sub>

BeF<sub>2</sub>

SO<sub>2</sub>

AgI

What are SO<sub>2</sub> & PCl<sub>5</sub>

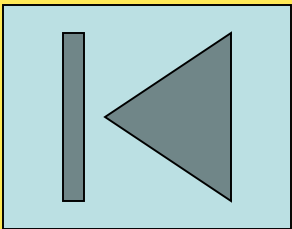


9.3

25 pts.

These are the correct prefixes for 1 through 5, listed in order, that are used in the binary molecular naming system.

What are mono-, di-, tri-, tetra-, & penta-?

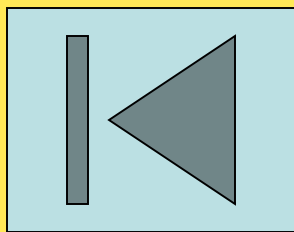




9.3

30 pts.

These are the correct prefixes for 6 through 10, listed in order, that are used in the binary molecular naming system.

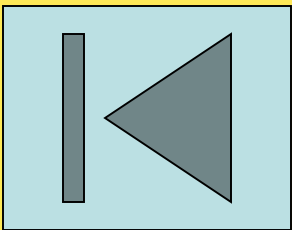


What are Hexa-, hepta-, octa-, nona-, & deca?

9.3

35 pts.

This is the correct formula for  
calcium dihydrogen  
phosphate?

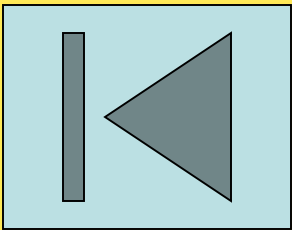


What are Ca(H<sub>2</sub>PO<sub>4</sub>)2?

9.3

40 pts.

This is the correct name for

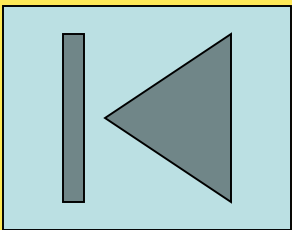


What is Tin (II)  
Phosphate?

9.3

45 pts.

This school won 3 straight state Nebraska Class A volleyball championships after being runnerup several times the previous **decade**.

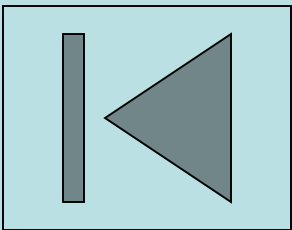


What is PLHS?

9.4

5 pts.

Consider a mystery compound having the formula  $M_xT_y$ . If the compound is **not an acid**, if it contains only two elements, and if M is not a metal, this compound must be this type of compound.

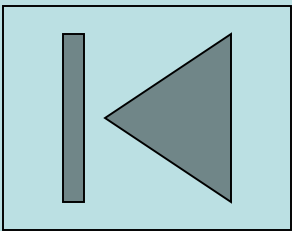


What is a **Binary**  
**Molecular compound?**

9.4

10 pts.

Acids always produce these  
type of ions when they are  
dissolved in water.



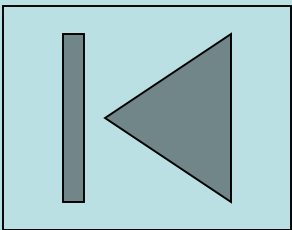
What are Hydrogen Ions?

9.4

15 pts.

Binary acids always have this prefix & this ending in their name.

What are hydro & -ide?

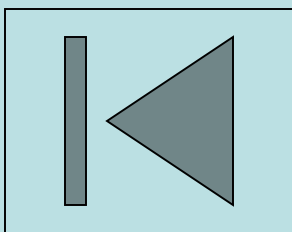


# 9.4

20 pts.

Of the following choices, these numbers represent both the correct formula and correct name of an acid.

1.  $\text{HClO}_3$ , chloric acid
2.  $\text{HNO}_2$ , hydronitrous acid
3.  $\text{H}_3\text{PO}_4$ , phosphoric acid
4.  $\text{HI}$ , iodic acid



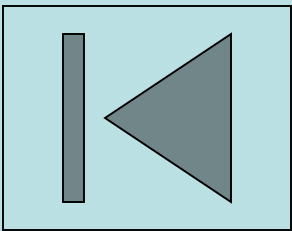
What are # 1 and #3?



9.4

25 pts.

These are the correct formulas for  
sulfurous and sulfuric acid,  
respectively

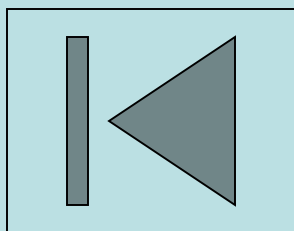


What are H<sub>2</sub>SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub>?

# 9.4

30 pts.

These are the suffixes for acid names that involve the –ate, & the –ite anion respectively

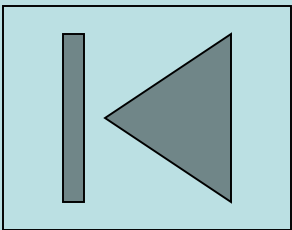


What is –ic & -ous?

9.4

35 pts.

These are the names,  
respectively, of the acids  
 $\text{H}_3\text{PO}_3$  &  $\text{H}_3\text{PO}_4$

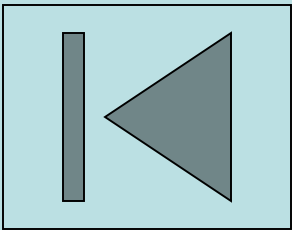


What is *phosphorous and phosphoric?*

9.4

40 pts.

Bases always produce these ions when dissolved in water.



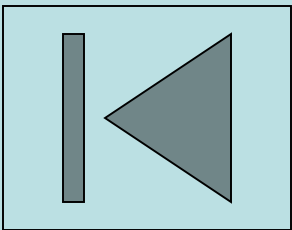
What are hydroxide ions?

9.4

45 pts.

In any chemical compound,  
the elements are always  
combined in the same  
proportion by this.

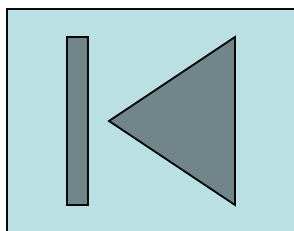
What is mass?



9.5

5 pts.

**This law states that** in samples of any chemical compound, the masses of the elements are always in the same proportion

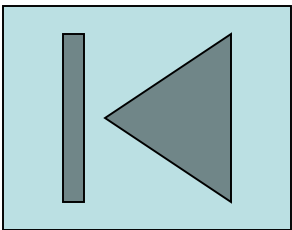


What is the law of definite proportions?

# 9.5

10 pts

**This law states that** whenever two elements form more than one compound, the different masses of one element that combine with the same mass of the other element are in the ratio of small whole numbers



What is the Law of  
Multiple Proportions?

# 9.5

## 15 pts

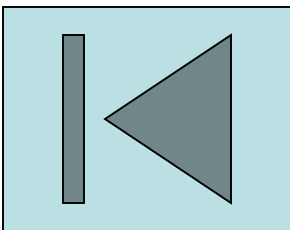
Of the four selections listed below, these two best illustrates the law of multiple proportions

1. **CO & CO<sub>2</sub>**

2. **CaCl<sub>2</sub> & CaBr.**

3. **SO & SO<sub>2</sub>**

4. **NO & NaO**



What are 1 & 3?

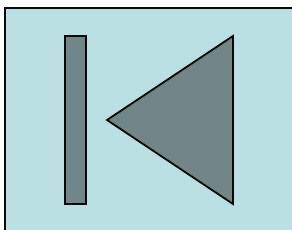


## 9.5 (also 9.1)

20 pts.

**Of the following 4 selections, these two have the symbol and name for both of the ions given correctly?**

1.  $\text{NH}^+$ : ammonia;  $\text{Na}^+$ : Sodium
2.  $\text{C}_2\text{H}_3\text{O}_2^-$ : acetate;  $\text{C}_2\text{O}_4^-$ : oxalite
3.  $\text{PO}_3^{3-}$ : phosphate;  $\text{PO}_4^{3-}$ : phosphite
4.  $\text{OH}^-$ : hydroxide;  $\text{O}^{2-}$ : oxide

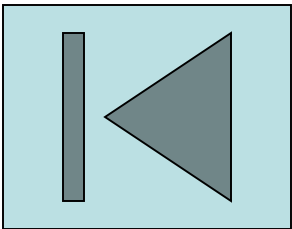


**What are # 1 & # 4?**

9.5

25 pts.

She is one of two current  
Nebraska U.S. Senators.



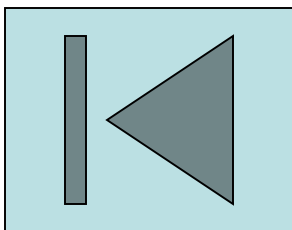
Who is Deb Fischer?

# 9.5

30 pts.

**Of the following 4 selections, these have the symbol and name for both of the ions given correctly? (more than 1 answer is correct)**

1. Bicarbonate:  $\text{HCO}_3^{-1}$ ; carbonate:  $\text{CO}_3^{-1}$
2. dichromate:  $\text{Cr}_2\text{O}_7^{2-}$ ; chromate:  $\text{CrO}_4^{2-}$
3. nitrate:  $\text{NO}_3^{-1}$  ; nitrite:  $\text{NO}_2^{-1}$
4. sulfide:  $\text{S}^{2-}$ ; sulfite:  $\text{SO}_4^{2-}$

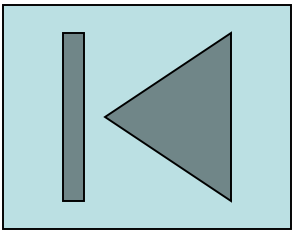


What are 2, 3, 4 ?

9.5

35 pts.

Acid formulas always start with this letter?

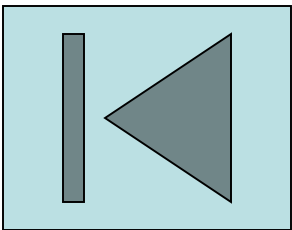


What is H?

# 9.5

40 pts.

This former part owner and general manager of the Texas Rangers is the son of a former CIA director and the brother of a former state governor.



Who is George W. Bush?

9.5

45 pts.

This is the formula for a  
compound consisting of  
Sodium and Zinc

What is none or does not  
exist?

