

Naming & Formula Writing

Unit Quiz Review

LEARNING TARGETS

Explain how to determine the charges of monatomic ions.

Explain how polyatomic ions differ from and are similar to monatomic ions.

Apply the rules for naming and writing formulas for binary ionic compounds.

Apply the rules for naming and writing formulas for ionic compounds with polyatomic ions.

Apply the rules for naming and writing formulas for binary molecular compounds.

1. How are monatomic and polyatomic ions similar and different?
2. Determine the correct charges for each of the following monatomic ions.
 - a. Boron
 - b. Sulfur
 - c. Calcium
 - d. Iron (2 electrons lost)
 - e. Arsenic
 - f. Barium
3. What are the steps you should take when writing the chemical formula for a *binary ionic compound*?
4. What are the steps you should take when writing the name of a *binary ionic compound*?
5. What are the steps you should take when writing the chemical formula for an ionic compound that contains a *polyatomic ion*?
6. What are the steps you should take when writing the name of ionic compound that contains a *polyatomic ion*?

7. What are the steps you should take when writing the chemical formula for a *molecular compound*?
8. What are the steps you should take when writing the name of a *molecular compound*?
9. Write the name for the following compounds.

Chemical Formula	Compound Name	Ionic or Molecular Compound
K_2CO_3		
SO_2		
KOH		
Li_3PO_4		
BrF_5		
$Sn(NO_2)_4$		
$CuMnO_4$		
Be_3N_2		
Pb_3N_4		
Cu_2O		
AuI_3		
CrF_3		

Name: _____

Chemical Formula	Compound Name	Ionic or Molecular Compound
$(\text{NH}_4)_2\text{CO}_3$		
BI_3		
$\text{Rb}_2\text{Cr}_2\text{O}_7$		
CCl_4		
$\text{Ca}(\text{SCH})_2$		
Na_2SO_3		
P_4S_6		
SeF_6		
XeF_4		
H_2O		

10. Write the chemical formula for each of the compounds below.

Chemical Name	Chemical Formula	Ionic or Molecular Compound
Sodium fluoride		
Manganese (III) iodide		
Lead (IV) sulfide		
Copper (II) fluoride		
Tin (IV) sulfide		

Chemical Name	Chemical Formula	Ionic or Molecular Compound
Radium bromide		
Nickel (III) oxide		
Antimony tribromide		
Potassium selenide		
Strontium oxide		
Calcium sulfide		
Sodium hydroxide		
Cobalt (II) carbonate		
hexaboron silicide		
Iron (III) chromate		
Ammonium phosphide		
chlorine dioxide		
Ammonium acetate		
phosphorus trioxide		
Uranium (III) hydroxide		
Barium bicarbonate		
Dinitrogen trioxide		

Name: _____