

HW Bonding and Nomenclature

- How many valence electrons do the following atoms have?
 - Potassium
 - Carbon
 - Magnesium
 - Oxygen
- How many electrons will each element gain or lose in forming an ion?
 - Calcium
 - Aluminum
 - Fluorine
 - Oxygen
- Write the following elements as the ions they will naturally make.
 - Potassium
 - Calcium
 - Bromine
 - Phosphorus
- Write the electron configuration of Cl^{-1} .
- Label the following compounds as ionic, metallic or covalent.
 - NaCl
 - H_2O
 - SO_2
 - $\text{Ca}(\text{CO}_3)_2$
 - Fe
- Write the formula for the following chemicals.
 - Lithium chloride

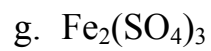
 - Sodium carbonate

 - Chromium (III) nitrate

 - Sodium iodide

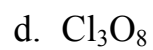
- e. Iron (II) cyanide
- f. Ammonium chlorate
- g. Ammonium phosphate

7. Write the name for the following formulas.



8. What is the name of these compounds.





9. What is the formula of these compounds.

a. Phosphorus pentachloride

b. Iodine heptafluoride

c. Chlorine trifluoride

d. Iodine dioxide

e. Carbon tetrabromide

f. Diphosphorus trioxide