

# Writing Formulas and Naming Compounds

**Directions:** Answer the following questions in the spaces provided. Refer to the periodic table for help.

1. **Define an oxidation number.** Is the number of electrons an atom will **lose** **gain** to become a positive ion or **lose** **gain** to become a negative ion and have a full outer energy level of electrons
2. What is the usual oxidation number of oxygen? Of hydrogen? **O H**
3. What is the sum of all the oxidation numbers in any compound? **use a number**

**Directions:** Use the periodic table to identify the oxidation numbers of the elements in each group.

Group	1	2	6	7	8
Oxidation number					

**Directions:** Write the formulas for the following compounds. Use the periodic table for help.

Symbols with oxidation numbers

Formula

10. copper(II) sulfate \_\_\_\_\_
11. calcium chloride \_\_\_\_\_
12. iron(II) oxide \_\_\_\_\_
13. copper(I) oxide \_\_\_\_\_
14. sodium sulfide \_\_\_\_\_
15. magnesium bromide \_\_\_\_\_

**Directions:** complete the following table, providing the name of the compound and the total number of atoms in each formula given.

Formula	Name	Number of Atoms
16. $(\text{NH}_4)\text{OH}$		
17. $(\text{NH}_4)\text{Cl}$		
18. $\text{Ag}_2\text{O}$		
19. $\text{K}_2(\text{SO}_4)$		
20. $\text{Ca}(\text{NO}_3)_2$		
21. $\text{Na}_2\text{S}$		