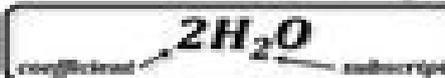# Counting Atoms Worksheet 1

For each problem, *you must follow these steps:*

► Recognize and record individual elements.
► Recognize the **subscripts** as the *number of atoms* for an element.
► Recognize the **coefficient** as the *number of molecules* of that substance.
► Calculate the total number of atoms making up the chemical formula.

$2H_2O$ coefficient   subscript

Examples:

a) $NaCO_3$ $Na \Rightarrow 1$
           $C \Rightarrow 1$
           $O \Rightarrow 3$

Answer: 5 total atoms

b) $5ZnSO_4$ $Zn \Rightarrow (5 \times 1 = 5)$
             $S \Rightarrow (5 \times 1 = 5)$
             $O \Rightarrow (5 \times 4 = 20)$

Answer: 30 total atoms

1) H_2O

2) $MgCl_2$

3) Li_2SO_4

4) $NaC_2H_3O_2$

5) NH_4CL

6) HBr

7) CH_4

8) $4HNO_3$

9) $4Li_2O$

10) $3H_2O$

11) $3Al_2O_3$

12) $2CH_3OH$

13) $2H_3NCH_2Br$

14) $4HFSbF_5$