

1. The **symbol** of an element represents one atom of that element.

e.g., Na =

2. A **subscript** is a number written at the **lower right** corner **behind the symbol** of an element. If there is more than one atom of the element, then a subscript is used to indicate the number of atoms.

e.g., H<sub>2</sub> =

3. A **subscript outside a bracket** multiplies all the elements inside the brackets.

e.g., Mg<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> =

Mg = \_\_\_\_\_  
 P = \_\_\_\_\_  
 O = \_\_\_\_\_

3. a. A **coefficient** is a number written **in front of a chemical symbol** and indicates the number of atoms of that element.

e.g., 3 C =

- b. A **coefficient** is a number written **in front of a chemical formula** and indicates the number of molecules of that compound.

Note: a coefficient multiplies the number of atoms of each element in the formula

e.g.,

### 2 H<sub>2</sub>O

\_\_\_\_\_ molecules of H<sub>2</sub>O

\_\_\_\_\_ H (hydrogen)

\_\_\_\_\_ O (oxygen)

### 3 CuSO<sub>4</sub>

\_\_\_\_\_ molecules of CuSO<sub>4</sub>

\_\_\_\_\_ Cu (copper)

\_\_\_\_\_ S (sulphur)

\_\_\_\_\_ O (oxygen)

### 4 Pb(NO<sub>3</sub>)<sub>2</sub>

\_\_\_\_\_ molecules of Pb(NO<sub>3</sub>)<sub>2</sub>

\_\_\_\_\_ Pb (Lead)

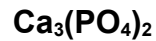
\_\_\_\_\_ N (nitrogen)

\_\_\_\_\_ O (oxygen)

Complete the following charts by using the coefficients and subscripts listed in the in the compounds below.



Type of Atom	# of Atoms
_____	_____
_____	_____
_____	_____
Total	_____



Type of Atom	# of Atoms
_____	_____
_____	_____
_____	_____
Total	_____



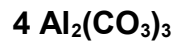
Type of Atom	# of Atoms
_____	_____
_____	_____
_____	_____
Total	_____



Type of Atom	# of Atoms
_____	_____
_____	_____
Total	_____



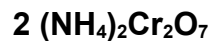
Type of Atom	# of Atoms
_____	_____
_____	_____
_____	_____
_____	_____
Total	_____



Type of Atom	# of Atoms
_____	_____
_____	_____
_____	_____
Total	_____



Type of Atoms	# of Atoms
_____	_____
_____	_____
_____	_____
Total	_____



Type of Atom	# of Atoms
_____	_____
_____	_____
_____	_____
_____	_____
Total	_____