

Name: _____

Date: _____

Lesson 9A: How to Count Atoms

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

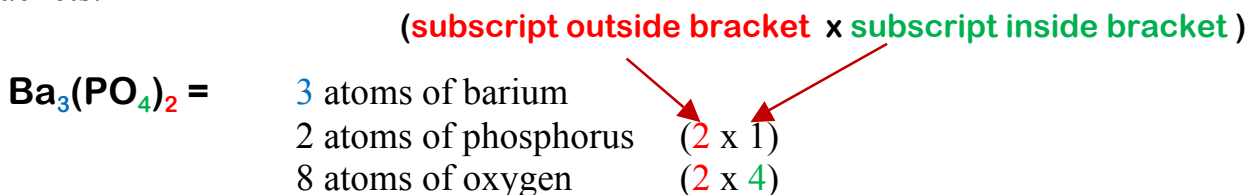
Ca = 1 atom of calcium

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 in the molecule, then a **subscript** is used to indicate the **number of atoms**.

N₂ = 2 atoms of nitrogen

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



4. (a) A **coefficient** is a number written **in front of** a chemical symbol that indicates the **number of atoms** of that element.

3C = 3 atoms of carbon

- (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.

