Using Chemical Formulas Notes

- Knowing a chemical formula we can identify the number of _____.

- The _____ can be determined by adding the masses of each atom included.

- Remember the mass of an element's atom can be identified by looking at the periodic table, typically at the bottom of the box.

Define Formula Mass:

- Units:

- Referred to as the _____ when referring to molecular compounds (covalent).

- Subscripts provide a _____ between the number of_____ for each element involved.

Practice Formula Mass

- H_2SO_4

- $Ca(NO_3)_2$

- $MgCl_2$

Molar Mass
- Numerically equal to _____

- Units:

- Total molar mass identified per formula depends on the number of _____ involved.

Moles (measurement)
- A mole is the _____ of a substance.

- One mole =

- In chemistry, object are _____ and _____.

Practice Molar Mass
- Al_2S_3

- $NaNO_3$

- $Ba(OH)_2$

Molar Mass used as a conversion factor.
- Units:

- The mass of a substance can be determined by:

- The number of moles of a substance can be determined by:

Percent Composition
- Percentage by mass of each element in a compound.

- An element's percentage is _____ on the sample size of the compound (coefficient)

Percentage Practice
- Find the mass percentage of water in ZnSO4*7H20.

- Find the percentage composition of the following:
    - PbCl2

    - $Ba(NO_3)_2$

- Magnesium hydroxide is 54.87% by oxygen by mass.
  - How many grams of oxygen are in 175 g of the compound?

  - How many moles of oxygen is this?