

## Chemistry (Math Notes)

### Module #5

#### Ionic Compounds

A more accurate definition of an ionic compound is a compound that carries \_\_\_\_\_, which are bound together because of \_\_\_\_\_, like magnets.

Ionic Compounds can be formed in \_\_\_\_ ways.

- 1.
- 2.
- 3.
- 4.

EXAMPLES:

#### Covalent Compounds

There are \_\_\_\_\_ types.

A polar covalent compound has \_\_\_\_\_ charges on some or all of its atoms because the electrons are shared \_\_\_\_\_ between the atoms involved.

A purely covalent compound has no \_\_\_\_\_ charges on any of its atoms because the electrons are shared \_\_\_\_\_ between the atoms involved.

In order to be polar, a compound must have polar bonds AND these bonds cannot be of equal polarity and equal distribution in space.

The polarity of the bonds is determined by the \_\_\_\_\_ in \_\_\_\_\_ of the atoms involved.

EXAMPLES:

### Molecular Geometry

Molecules are not flat, but \_\_\_\_\_. Lewis Structures represent a \_\_\_\_\_ picture. A molecule's shape is defined by its \_\_\_\_\_, which want to \_\_\_\_\_ each other because they are the same charge. We use a \_\_\_\_\_ (--) to represent the electrons.