|  |  |
| --- | --- |
| Science 9 | Unit B |
| Section 3.1 – 3.2: Naming Compounds |  |

Quiz Tomorrow

Chemistry Cards need to be handed in

|  |  |  |  |
| --- | --- | --- | --- |
| Review YesterdayNoteBook QUIZDangers of DHMO**Naming Compounds**3 Versions1. Common Name

What you see on a consumer label1. Chemical Name

 What you will see on a MSDS label1. Chemical Formula

the elements are found in the chemical(Same in all Languages)Reading Chemical FormulasNi2O3(s)2 Nickel Atoms 3 Oxygen Atoms SolidCompounds and Elements Worksheet1. **If A Metal is combined with a Non-Metal you get a Ionic Compound**
2. **If two Non-Metals are combined you have a Molecular Compound**

**Ionic Compounds**Properties:* Solids at room temperature
* Good Conductors
* Distinct Crystal Shape
* Made from metals paired with non-metals

Pure Substances made from ‘ions’Ions are ‘+’ or ‘-‘ charged elementsAn element either gains or loses it’s electrons**Naming Ionic Compounds**Metals are named first, non-metals secondMetal Ions: * ‘+’ charged
* Check the periodic table for charges
* If only 1 charge just the element name
* If More than 1 charge then use roman numerals to show which charge is used

Non-Metal Ions:* ‘-‘ charged
* Check the periodic table
* Non-metals only have one charge
* Change the suffix to –ide

Polyatomic Ions* ‘-‘ or ‘+’ Charged
* Found on a periodic table
* No need to change the name

Name to FormulaCalcium Chloride

|  |  |
| --- | --- |
| MetalCa2+Balance Charges2+Ca | Non-MetalCl-1. + 1-

Cl2 |

CaCl2(s)Always solid unless in solution (water) | Table Salt, WaterSodium Chloride, Dihydogen MonooxideNaCl(s), H2O(l)HF(g) = 1 Hydrogen 1 Fluorine GasSalt in Water = NaCl(aq) C9H8O4(s) = 9Carbon 8Hydrogen 4 Oxygen Solid Ionic = Metal + Non-MetalNaCl melts at 801CForms Ions in waterForms cubesK+, Na+, Fe3+ or Fe2+Cl-, Br-, SO4Lithium LeadLi+ Pb2+ or Pb4+LithiumLead (II) or Lead (IV)Oxygen BromineO2- Br1-Oxide BromideCarbonate SulfateCO32- SO42-Carbonate Sulfate |