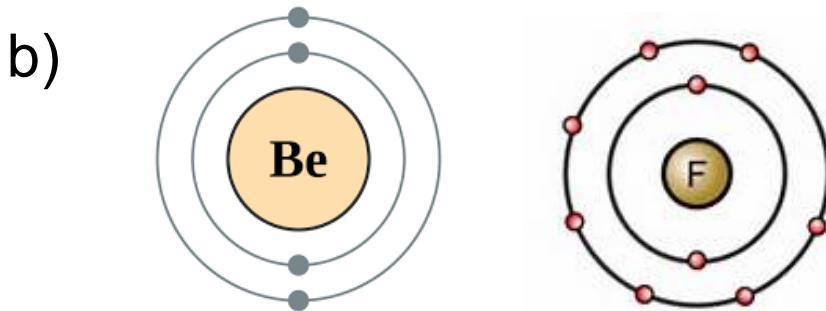


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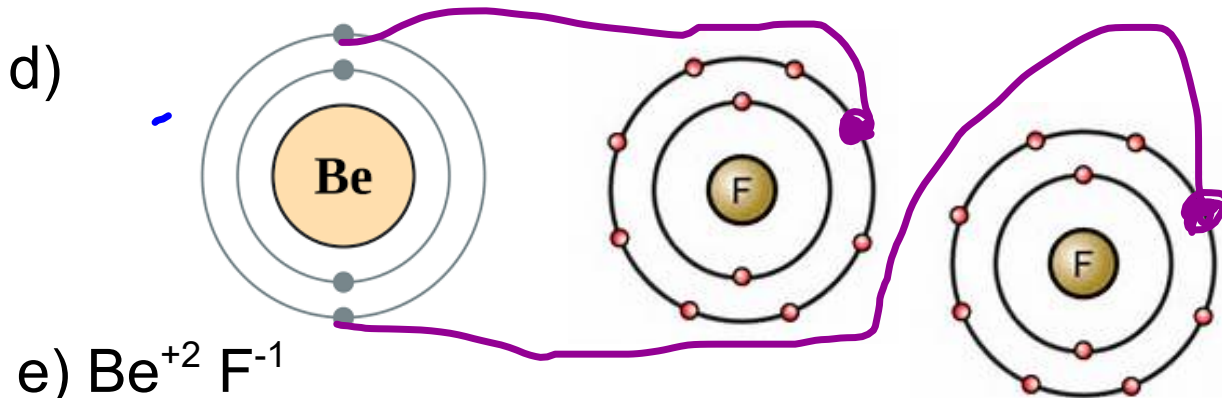
1a) metals form compounds with non-metals by transferring electrons

b) sodium will give an electron to chlorine forming sodium chloride

2.a) beryllium is the metal, fluorine is the non-metal



c) beryllium must lose 2, fluorine must gain 1.



e) $\text{Be}^{+2} \text{F}^{-1}$

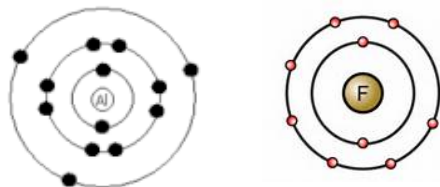
f) neutral

g) BeF_2

name: beryllium fluoride

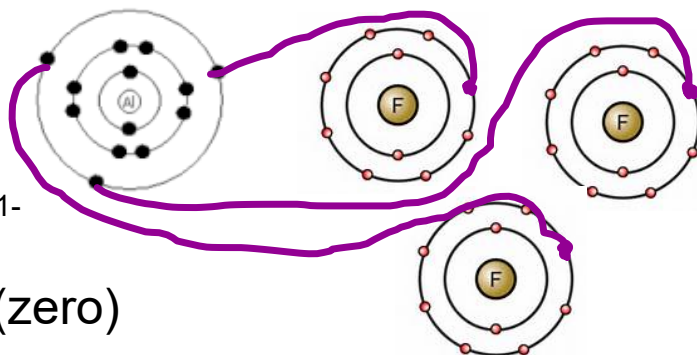
3.a) Aluminum is the metal, Fluorine is the non-metal

b)



c) aluminum loses 3 electrons, fluorine gains 1 electron

d)



e) $\text{Al}^{3+} \text{F}^{1-}$

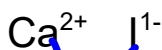
f) none (zero)

g) AlF_3

4. Electrons

How to Write an Ionic Compound Shortcut no Bohr diagrams required

1. Write the symbols (with the metal always being written first) and write the charge above the symbol to indicate the stable ion that each element forms.



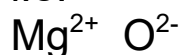
2. Cross the number, writing it as a subscript. We do not write the 1.



name: calcium iodide

Hint: Always reduce to the lowest numbers they can be

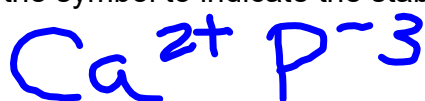
i.e.



Mg_2O_2 reduces to MgO

Example: calcium and phosphorous

1. Write the symbols (with the metal always being written first) and write the charge above the symbol to indicate the stable ion that each element forms.

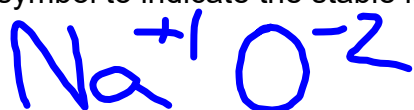


2. Cross the number, writing it as a subscript. We do not write the 1.

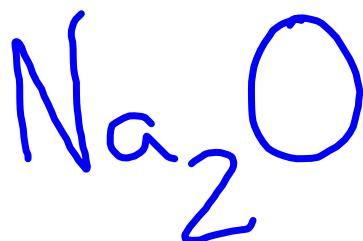


Example: sodium and oxygen

1. Write the symbols (with the metal always being written first) and write the charge above the symbol to indicate the stable ion that each element forms.



2. Cross the number, writing it as a subscript. We do not write the 1.



Naming Ionic Compounds

First name (name of metal) stays the same Second name (name of non-metal) changes to -ide ending

i.e. calcium and fluoride as a compound = calcium fluoride

magnesium and oxygen as a compound = magnesium oxide

lithium and phosphorous = lithium phosphide

Try These

Name and write the formulas for the following compounds:

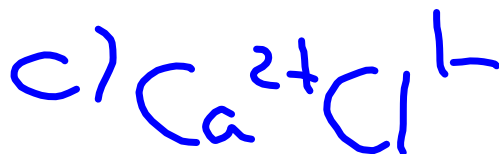
- a) sodium and fluorine
- b) magnesium and oxygen
- c) calcium and chlorine



sodium fluoride



magnesium oxide



calcium chloride

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Ionic Cmpds Worksheet

