

# Sept 13, 2019

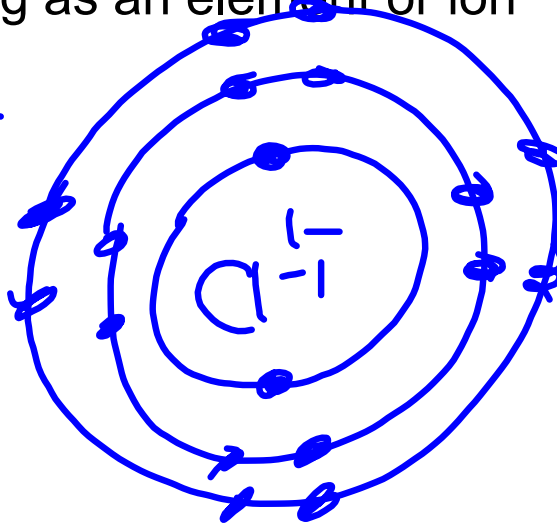
Answers pg 187 #5,6  
Ionic Compounds

**Quiz Tuesday !!**

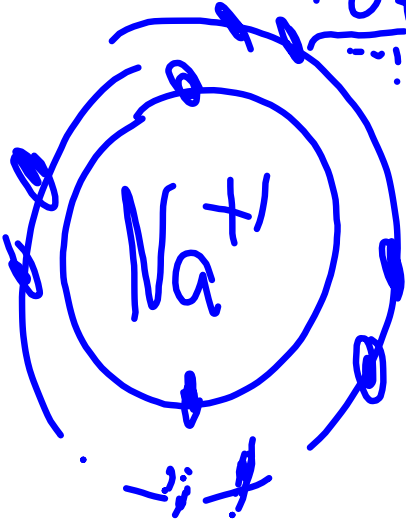
## Warm-Up

1. Label each of the following as an element or ion and draw the bohr diagram

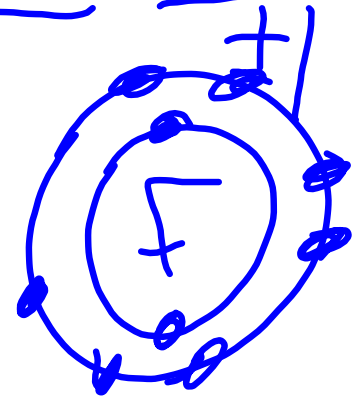
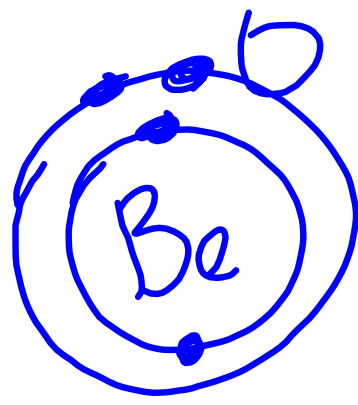
<u>Cl<sup>-</sup></u>	<u>ion</u>
Be	element
F	element
<u>Na<sup>+</sup></u>	<u>ion</u>



<u>17p<sup>+</sup></u>	<u>17p<sup>+</sup></u>
<u>17e<sup>-</sup></u>	<u>18e<sup>-</sup></u>



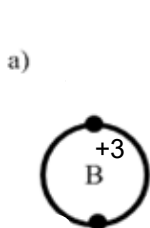
<u>11p<sup>+</sup></u>	<u>11p<sup>+</sup></u>
<u>11e<sup>-</sup></u>	<u>10e<sup>-</sup></u>



# pg 187 #5,6

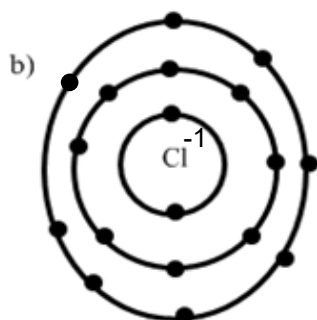
5. a full valance

6.



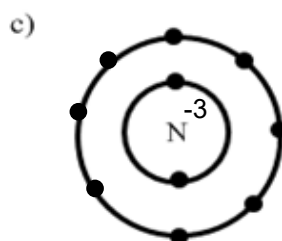
loses 3

helium



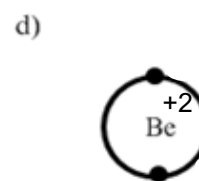
gains 1

argon



gains 3

neon



loses 2

helium

# Compounds

Compounds are made by elements transferring or sharing electrons.

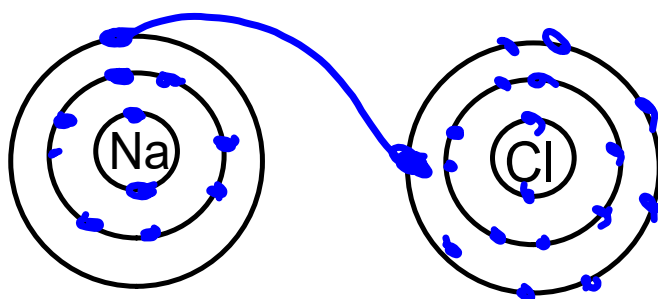
- the further an e<sup>-</sup> is away from the nucleus, the greater the possibility of it making a compound with another element
- the **outermost electrons (valance e<sup>-</sup>)** are involved in making compounds

## Ionic compounds

- created from ions
- composed of a **metal (positive ion (cation))** and a **nonmetal (negative ion (anion))**
- electrons are transferred from the metal to the nonmetal
- once the transfer has taken place, the compound is neutral and has an overall charge of 0.
- also remember that when non-metals form ions their name changes to an -ide ending. i.e. chlorine = chloride, oxygen = oxide, nitrogen = nitride etc

Example 1:  
sodium and chlorine

Salt consists of **sodium (Na)** and **chlorine (Cl)**.



Charges on ions:



Formula for compound:



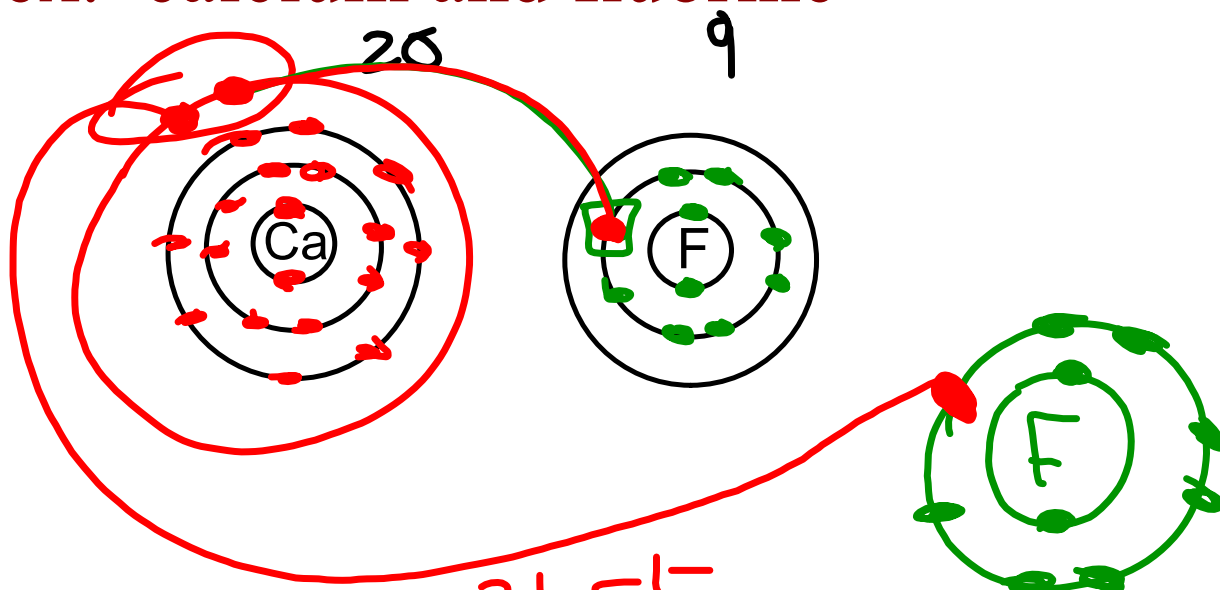
Charge on Compound:

none

Name of compound :

sodium chloride

ex. calcium and fluorine



Charges on ions:  $Ca^{2+} F^{-}$   
 Formula for compound:  $CaF_2$  subscript  
 Charge on Compound:  
 Name of compound : calcium fluoride

**pg. 189 #1-4**