

1. Compound

1. A pure \_\_\_\_\_ that contains \_\_\_\_\_ or more \_\_\_\_\_.

2. Chemical \_\_\_\_\_

2. Contains atomic \_\_\_\_\_ and subscripts to show the \_\_\_\_\_ and the \_\_\_\_\_ of atoms of each \_\_\_\_\_ in the compound.

**NaCl** sodium chloride (salt)

**H<sub>2</sub>O** dihydrogen oxide (water)

**CO<sub>2</sub>** carbon dioxide

3. What is a molecule?

3. A \_\_\_\_\_ particle that forms as a result of \_\_\_\_\_.

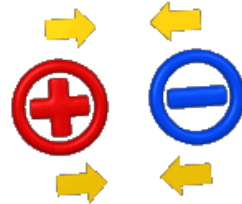
4. What is a CHEMICAL BOND?

4. A \_\_\_\_\_ that holds \_\_\_\_\_ in a compound.

5. What is an \_\_\_\_\_

Bond?

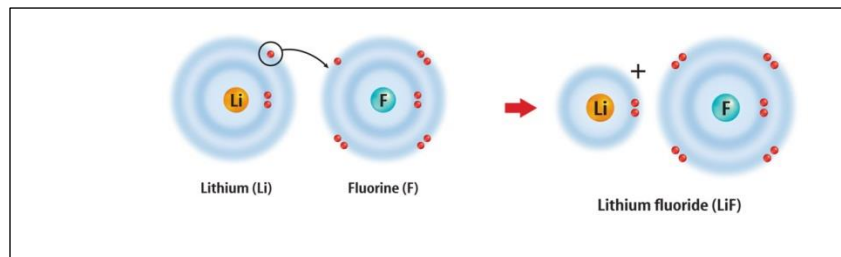
5. An \_\_\_\_\_  
 \_\_\_\_\_ between  
 \_\_\_\_\_ and  
 \_\_\_\_\_ charged  
 \_\_\_\_\_ in an ionic compound.



- An atom can become \_\_\_\_\_ by \_\_\_\_\_ one or more \_\_\_\_\_ to another atom.  
 Become an \_\_\_\_\_

EXAMPLE:

- A lithium atom gives up an electron to a fluorine atom.
- The result is a positively charged lithium ion and a negatively charged fluoride ion.



6. Likely to form bonds....

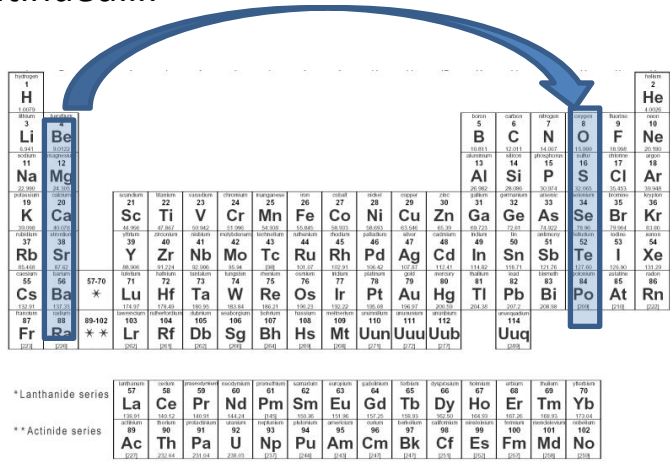
6.

1 H																	2 He	
3 Li											4 Be	5 B	6 C	7 N	8 O	9 F	10 Ne	
11 Na											12 Mg	13 Al	14 Si	15 P	16 S	17 Cl	18 Ar	
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr	
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe	
55 Cs	56 Ba	57-70 * La Ce Pr Nd Pm Sm Eu Gd Tb Dy Ho Er Tm Yb Lu	71 Hf	72 Ta	73 W	74 Re	75 Os	76 Ir	77 Pt	78 Au	79 Hg	80 Tl	81 Pb	82 Bi	83 Po	84 At	85 Rn	
87 Fr	88 Ra	89-102 ** Ac Th Pa U Np Pu Am Cm Bk Cf Es Fm Md No	103 Lr	104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Uun	111 Uuu	112 Uub	113 Uuq	114 Uuq	115 Uuq	116 Uuq	117 Uuq	118 Uuq

\* Lanthanide series

\*\* Actinide series

6. continued....

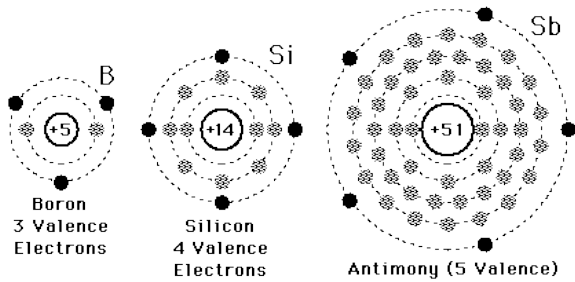


7. What are properties of \_\_\_\_\_? \_\_\_\_\_?

- 7.
- \_\_\_\_\_ and break apart easily
  - Have \_\_\_\_\_ melting and boiling points
  - Many \_\_\_\_\_ in water
  - Usually \_\_\_\_\_ at room temperature

8. What are VALENCE ELECTRONS?

8. Electrons in the \_\_\_\_\_ level.



9. What does a Lewis Dot Diagram look like?

10. What kind of elements don't react?

11. What is a \_\_\_\_\_  
\_\_\_\_\_

12. What are \_\_\_\_\_

Compounds?

13. What are properties of Covalent bonds?

9.

10. \_\_\_\_\_ that are \_\_\_\_\_ rarely react to form compounds.

11. A \_\_\_\_\_ bond formed when atoms \_\_\_\_\_ electrons. (potluck)

- Elements that are \_\_\_\_\_ together on the periodic table are \_\_\_\_\_ likely to share electrons in a \_\_\_\_\_ bond than to \_\_\_\_\_ electrons.

12. *Organic compounds are covalent compounds containing \_\_\_\_\_ atoms and are important for \_\_\_\_\_ organisms.*

13.

- Can be solids, liquids, or gases at room temperature
- Usually have \_\_\_\_\_ melting and boiling points than ionic compounds
- Do \_\_\_\_\_ usually separate in water
- Most do \_\_\_\_\_ conduct electricity

14. Single Bond

15. Double and  
Triple Bonds

14. A bond formed when sharing  
\_\_\_\_\_ electron.

15. A bond formed when sharing \_\_\_\_\_ or \_\_\_\_\_  
electrons.