Name: Period:

Stability in Bonds

Directions: *Review each of the chemical formulas below. Write the name of the chemical using the rules discussed and used in class. Refer to your notes and textbook for help!*

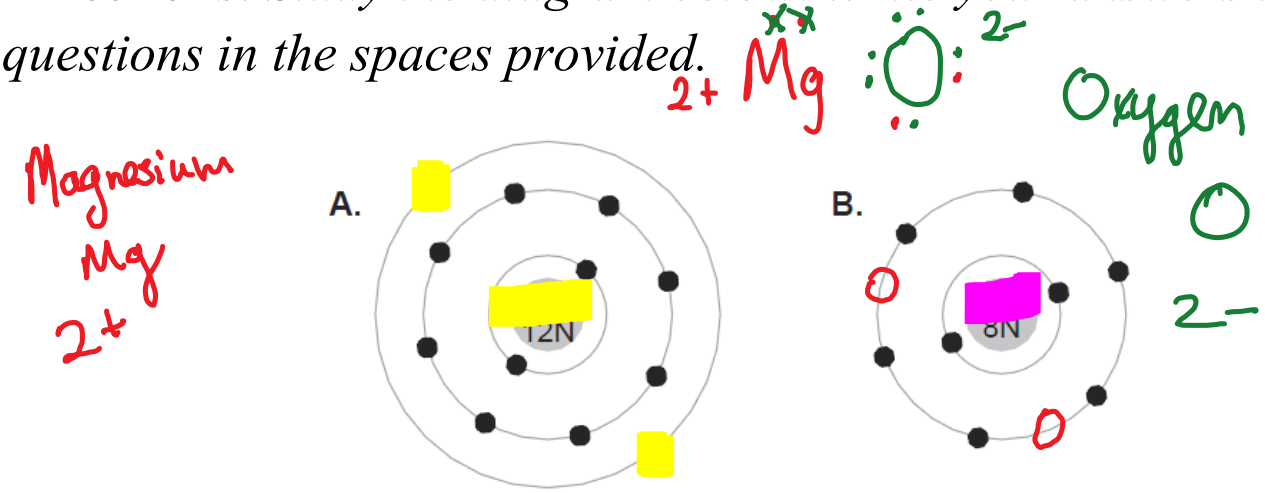
1. **H_2O;** dihydrogen monoxide
2. **HCl;** monohydrogen monochloride
3. **AgCl;** silver chloride
4. **$CaSO_4$;** calcium sulfate
5. **$FeSO_4$;** iron (II) sulfate

Directions: *Complete the table below by using the formula of each compound to identify the elements that each compound contains and the number of atoms of each of these elements in a unit of the compound. The first formula has been done for you.*

Formula	Element 1	Element 2	Element 3
H_2O	2 hydrogen	1 oxygen	
14. NaOH (Sodium hydroxide)	1 sodium	1 oxygen	1 hydrogen
15. NaCl (Sodium chloride)	1 Sodium	1 chlorine	
16. NH_3 (mononitrogen trihydride)	1 N	3 H	
17. H_2SO_4 (dihydrogen monosulfate)	2 H	1 S	4 O
18. SiO_2 (monosilicon dioxide)	1 Si	2 O	

Name: Period:

Directions: *Study the diagram below. Write your answers to the questions in the spaces provided.*



19. If atom A loses electrons to atom B,

a. how many electrons will atom A lose? 2

b. how many electrons will atom B gain? 2

c. what will be the oxidation number of atom A? 2+

d. what will be the oxidation number of atom B? 2-

e. what will be the total charge of the compound formed? Ø

MgO magnesium oxide

f. what type of bond will form? ionic

(-)(+)