

8. Complete the table below.

Element			Ion			
Element Symbol	Element Name	At #	Change in Number of e^-	Ion Symbol	Name of Ion	Noble Gas With Same Number of Electrons
Cl	chlorine	17	gains 1	Cl ⁻	chloride	argon
		13	loses 3			
O						
		20				
					sulfide	
			loses 1			argon
				H ⁺		nil
H					hydride	helium
Mg						
		3				
			gains 1			neon

SCIENCE 90
NOMENCLATURE PRACTISE

PART A. BINARY

IONIC COMPOUNDS

1. Name the following compounds.

- | | | |
|-----------------------------------|-----------------------------------|----------------------|
| a. SrO | b. Al ₂ S ₃ | c. HBr |
| d. AlCl ₃ | e. MgO | f. CsF |
| g. Ca ₃ P ₂ | h. MgS | i. CaO |
| j. BaF ₂ | k. K ₂ O | l. BaCl ₂ |

2. Write the formula.

- | | | |
|-----------------------|-----------------------|-------------------------|
| a. sodium bromide | b. calcium oxide | c. zinc sulfide |
| d. silver bromide | e. aluminum oxide | f. sodium fluoride |
| g. zinc oxide | h. sodium chloride | i. barium fluoride |
| j. calcium chloride | k. aluminum phosphide | |
| l. aluminum nitride | m. hydrogen sulfide | n. barium hydride |
| o. magnesium nitride | p. hydrogen selenide | q. lithium chloride |
| r. potassium oxide | s. barium phosphide | t. potassium iodide |
| u. beryllium nitride | v. calcium nitride | w. aluminum chloride |
| x. hydrogen fluoride | y. gallium oxide | z. zinc arsenide |
| ii. cadmium phosphide | iii. calcium fluoride | iv. californium bromide |

MOLECULAR COMPOUNDS BOOKLET

SCIENCE 90

1. Write the names of the following formulas.

- | | | |
|---------------------------|------------------------------|-------------------|
| a. N_2O_5 | b. SO_2 | c. SF_6 |
| d. OF_2 | e. P_2O_4 | f. IBr_3 |
| g. NH_3 | h. P_2O_5 | i. HCl |
| j. Cl_2 | k. CO | l. CCl_4 |
| m. ICl_5 | n. P_4O_{10} | o. O_2 |
| p. PCl_5 | q. N_2O_3 | r. PF_5 |
| s. ClO_2 | t. N_2H_4 | u. NBr_5 |

2. Give the correct formula.

- | | | |
|-----------------------------|------------------------------|-----------------------|
| a. silicon dioxide | b. sulfur trioxide | c. oxygen |
| d. diphosphorous pentaoxide | e. phosphorous pentachloride | |
| f. oxygen diflouride | g. carbon tetraflouride | h. nitrogen triiodide |
| i. nitrogen monoxide | j. tetranitrogen octaoxide | k. flourine |
| l. nitrogen dioxide | m. tetrasulfur dinitrogen | n. bromine chloride |

- t. phosphorous triiodide

Practice Problems - Both Molecular and Ionic

Part I: Name the following compounds

- a. CH_4 b. KBr c. HCl d. PF_5 e. SiH_4
f. N_2H_4 g. I_2O_5 h. Al_2S_3 i. CaO j. HBr
k. Ca_3P_2 l. PF_5 m. F_2 n. NH_3 o. S_8

Part II: Write the formula for these compounds.

- m. sulfur octanitride n. glucose o. phosphorus pentachloride