Rules for Naming Compounds

- 1) Metals combine with non-metals in many compounds
- 2) Write the name of the metal first and then the non-metal
- 3) Change the ending of the non-metal to "-ide"
- 4) Each atom has its own *combining capacity*
- 5) Atoms combine so that EACH can fill its combining capacity.

Examples *combining capacities are from Tables2, 3 and 4 on pages 64-65

Aluminum (Al) has a combining capacity of 3 Chlorine (Cl) has a combining capacity of 1

Therefore a compound of aluminum and chlorine would be AlCl3 and would be called *aluminum chloride*

Try This!

Name the compound and write the formula for the compound formed by Potassium and Oxygen

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Further Examples

Aluminum and oxygen

aluminum (combining capacity 3) oxygen (combining capacity 2)

 Al_2O_3 aluminum oxide

Some metals have more than one combining capacity ex: copper, iron, lead, tin

Rule 6-Use the Roman Numeral to indicate the combining capacity of the metal element in the name

Example Iron has a combining capacity of either 2 or 3 Oxygen has a combining capacity of 2

therefore, FeO is Iron II oxide and Fe₂O₃is iron III oxide

Homework

Read pages 64-65 Do Questions 1-5 on page 65