Skill Practice 24

Ionic Bonding

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Practice

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Hour: \_\_\_\_\_

1. Write the symbol and charges for the following ions:

Example: calcium = Ca2+

 A) phosphide = \_\_\_\_\_\_\_\_ B) magnesium = \_\_\_\_\_\_\_\_ C) rubidium = \_\_\_\_\_\_\_\_

 D) fluoride = \_\_\_\_\_\_\_\_ E) aluminum = \_\_\_\_\_\_\_\_ F) sulfide = \_\_\_\_\_\_\_\_\_

1. Each of the following formulas is written incorrectly. Please rewrite them correctly.

Example: Ca2Cl = CaCl2

A) Ba2S = \_\_\_\_\_\_\_\_\_\_\_\_\_ B) Rb2N = \_\_\_\_\_\_\_\_\_\_\_\_\_ C) Li2Cl = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

D) Al3N3 = \_\_\_\_\_\_\_\_\_\_\_\_ E) Mg3Br2 = \_\_\_\_\_\_\_\_\_\_\_ F) O3Al2 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Write the formulas for the compound formed by the combination of the following pairs of atoms.

Example: nitrogen and magnesium = Mg3N2

 A) sodium and sulfur = \_\_\_\_\_\_\_\_\_\_\_ B) aluminum and chlorine = \_\_\_\_\_\_\_\_\_\_\_\_

 C) phosphorus and calcium = \_\_\_\_\_\_\_\_\_\_ D) barium and oxygen = \_\_\_\_\_\_\_\_\_\_\_\_\_

1. For each of the formulas you wrote in question 3 above, give the names for the compounds.

Example: Mg3N2 = magnesium nitride

A) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

C) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ D) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. In the blanks above each column, write the charge of the ions formed by atoms in that column. Note: group IA is done for you.

 +1 \_\_

 \_\_ \_\_ \_\_ \_\_ \_\_ \_\_