

CHM 110 Practice Set 2
Periodic Table and Ionic Compounds

Follow the directions for each part, and write answers in the provided blanks.

Find the requested information using the periodic table.

- 1) _____ The name of an element whose symbol is K
- 2) _____ The atomic weight of the element whose atomic number is 47
- 3) _____ The type of element silicon is (metal/nonmetal/metalloid)
- 4) _____ The type of element molybdenum is (metal/nonmetal/metalloid)
- 5) _____ The atomic number of tellurium
- 6) _____ The atomic symbol of rhenium
- 7) _____ The number of neutrons in the nucleus of an atom of carbon-14
- 8) _____ The number of electrons in a neutral atom of Ba
- 9) _____ The number of protons in the nucleus of an atom of vanadium
- 10) _____ The number of electrons in a neutral atom that contains 47 protons

Using the periodic table, predict the charges of the ions formed from these elements.

- 11) _____ Aluminum
- 12) _____ Chlorine
- 13) _____ Sulfur
- 14) _____ Potassium
- 15) _____ Phosphorus

Write the chemical formulas of these ionic compounds.

- 16) _____ sodium sulfide
- 17) _____ iron(II) chloride
- 18) _____ copper(I) nitride
- 19) _____ ammonium phosphate
- 20) _____ calcium nitrate
- 21) _____ chromium(III) oxide

Write the chemical name of these ionic compounds.

- 22) _____ $\text{Be}(\text{NO}_3)_2$
- 23) _____ Cu_3N_2
- 24) _____ $\text{Ca}(\text{OH})_2$
- 25) _____ $\text{Ti}(\text{SO}_4)_2$
- 26) _____ SrCl_2
- 27) _____ $(\text{NH}_4)_2\text{S}$