

Chapter 2: Worksheet #1 The Atom

1. Give the number of p^+ , n^0 , and e^- in the following isotopes.
 - a. ^{127}I
 - b. $^4\text{He}^{2+}$
 - c. $^{17}\text{O}^{2-}$
 - d. ^{209}Bi
 - e. $^{15}\text{N}^{3-}$
 - f. $^{107}\text{Ag}^+$
2. Write the complete symbol of the atom/ion that has the following:
 - a. $71 p^+, 104 n^0, 71 e^-$
 - b. $37 p^+, 49 n^0, 36 e^-$
 - c. $50 p^+, 68 n^0, 50 e^-$
 - d. $52 p^+, 76 n^0, 54 e^-$
3. Write the formula of the compound formed by combining:
 - a. **Mg** and **O**
 - b. **Na** and **S**
 - c. **Rb** and **I**
 - d. **Al** and **Cl**
 - e. **K** and **P**
 - f. **Sr** and **F**

4. Classify each element below as a **metal**, **metalloid** (or semi-metal), or **nonmetal**. If it is a metal, further classify it as a **main group**, **transition**, **lanthanide** or **actinide** metal.

a. K

b. Mg

c. S

d. Pb

e. Ru

f. Br

g. Eu

h. Ag

i. C

j. U

k. Fe

l. O

5. Give the group name of the following:

a. Cl

b. Se

c. Rn

d. Sr

e. Rb