**Science 10 – Chapter 5.5 - Review Exercises**

**Formulas for Atomic Theory**

Atomic number = number of protons

Atomic Mass - # of protons = # of neutrons

Atomic Mass is made up of the number # of neutrons and the # of protons

Number of electrons = Number of protons

**REVIEW QUESTIONS**

1. Using the periodic table, find the following information base on the information provided (see the example provided below).

(a) number of protons

(b) number of electrons

(c) number of neutrons

(d) symbol

(e) atomic mass

(f) name of element

**Example:**

1. **Mass of 54.9 wit 30 neutrons**

(a) number of protons ANS: 25

(b) number of electrons ANS: 25

(c) number of neutrons ANS: 30

(d) symbol ANS: Mn

(e) atomic mass ANS: 54.9

(f) name of element ANS: Manganese

1. **Os**

(a) number of protons \_\_\_\_\_\_\_\_

(b) number of electrons \_\_\_\_\_\_\_\_

(c) number of neutrons \_\_\_\_\_\_\_\_

(d) symbol \_\_\_\_\_\_\_\_

(e) atomic mass \_\_\_\_\_\_\_\_

(f) name of element \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Tantalum**

(a) number of protons \_\_\_\_\_\_\_\_

(b) number of electrons \_\_\_\_\_\_\_\_

(c) number of neutrons \_\_\_\_\_\_\_\_

(d) symbol \_\_\_\_\_\_\_\_

(e) atomic mass \_\_\_\_\_\_\_\_

(f) name of element \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **54 protons**

(a) number of protons \_\_\_\_\_\_\_\_

(b) number of electrons \_\_\_\_\_\_\_\_

(c) number of neutrons \_\_\_\_\_\_\_\_

(d) symbol \_\_\_\_\_\_\_\_

(e) atomic mass \_\_\_\_\_\_\_\_

(f) name of element \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **32 neutrons and mass of 58.9**

(a) number of protons \_\_\_\_\_\_\_\_

(b) number of electrons \_\_\_\_\_\_\_\_

(c) number of neutrons \_\_\_\_\_\_\_\_

(d) symbol \_\_\_\_\_\_\_\_

(e) atomic mass \_\_\_\_\_\_\_\_

(f) name of element \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Fm**

(a) number of protons \_\_\_\_\_\_\_\_

(b) number of electrons \_\_\_\_\_\_\_\_

(c) number of neutrons \_\_\_\_\_\_\_\_

(d) symbol \_\_\_\_\_\_\_\_

(e) atomic mass \_\_\_\_\_\_\_\_

(f) name of element \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ionic Compounds** are those that have a metal-nonmetal joined by an ionic bond.

Example: NaCl: The name of the metal (+) is given first followed by the name of the nonmetal (-)

Sodium (Na) and chlorine (Cl) produces **Sodium chloride**

1. Neutralize the following ionic compounds on your own paper if not enough space below (careful of order, metal first (+) then nonmetal (-)

1. Br and Sr \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Cs and N \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. At and Be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Li and O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. S and Na \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. N and Rb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. I and H \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Ra and C \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_