HONORS CHEMISTRY
WORKSHEET 6a. Name: _____

THESE ARE ALL REVIEW PROBLEMS! **SHOW ALL WORK!**

1._For each of the following atoms, specify the number of particles indicated:

	no. of protons	no. of neutrons	no. of electrons
$^{45}_{21}Sc$			
$^{35}_{16}S$			
$^{211}_{83}Bi$			

2. An atom has 52 neutrons and 38 electrons.
   a. How many protons does it have?
   b. What element is it?
   c. What is its atomic weight?
   d. What is its atomic number?

3. An ion has 18 electrons, 19 protons, and 20 neutrons.
   a. What is its electric charge?
   b. What element is it?
   c. What is its atomic weight?
   b. What is its atomic number?

4. Name the acid that contains:
   a. chromate ions
   b. carbonate ions
   c. acetate ions
   d. chlorate ions
   e. nitrite ions
   f. sulfite ions

5. Define each term:
   a. element
   b. solid
   c. atom

6. Different atoms with the same atomic weight but different atomic numbers are called _____.

   They have different numbers of _____.

CONTINUED ON THE REVERSE SIDE

7. Metallic elements _____ electrons

and form ions with a _____ charge.

8. Name each compound:

a. NO_2

b. $Al(OH)_3$

c. SiO_2

d. $ZnSO_4$

e. CF_4

f. PCl_5

g. $Ba(NO)_3$

h. Na_2CO_3

9. Name the insoluble precipitate formed by a reaction between:

a. Barium chloride and sulfuric acid

b. Sodium chloride and silver acetate

c. Iron (III) nitrate and potassium hydroxide

10. Name the SALT formed by a reaction between:

a. Acetic acid and strontium hydroxide

b. Lithium hydroxide and sulfuric acid

c. Nitric acid and magnesium hydroxide

11. Balance each reaction:

(a.) $Al(OH)_3 + H_2SO_4 \longrightarrow Al_2(SO_4)_3 + H_2O$

(b.) $Mg + Fe(NO_3)_3 \longrightarrow Mg(NO_3)_2 + Fe$

(c.) $Fe_2O_3 + C \longrightarrow Fe + CO_2$

12. Identify each of the reactions 11a, 11b, 11c as either an oxidation-reduction, precipitation reaction, acid-base neutralization, or other.

11a.

11b.

11c.

13. Find the molecular weight of each compound:

Carbon disulfide

Potassium oxide

Chromium (III) chloride

Lithium sulfate