

Name: _____

Block: _____

Date: _____

Chemistry 11

Elements and Compounds Worksheet

Assignment

1. Fill in the blanks in the following chart.

Element Name	Element Symbol	Common Ions Formed
a. Sodium		
b.	Cu	
c.	W	
d. Iron		
e.	Sn	
f. Potassium		
g.	Au	
h.	Ag	

2. Complete the following sentences by filling in the appropriate word from the list below.

Atomic number

Elements

Mixtures

Compound

Symbols

Properties

Carbon

Pure

Periodic table

Letters

Carbon dioxide

- a. _____ cannot be separated by physical or chemical means.
- b. Elements are abbreviated with _____, which consist of one or two _____.
- c. Elements are organized on the _____ according to their _____.
- d. Two or more elements chemically combined make up a _____.
- e. _____ is an example of an element and _____ is an example of a compound.
- f. Elements and compounds are called _____ substances because they have a unique set of chemical and physical _____.

3. Identify each of the following as either an element (E) or a compound (C).
- | | |
|------------------------|---------------------------------------|
| _____ a. carbon | _____ f. silicon dioxide |
| _____ b. water | _____ g. helium |
| _____ c. aluminum foil | _____ h. arsenic |
| _____ d. plastic | _____ i. carbon dioxide |
| _____ e. tin | _____ j. sodium chloride (table salt) |

4. Classify each of the following as one of an Atom (A), a Molecule (M) or an Ion (I).

- | | |
|--------------------|--------------------|
| a. P^{3-} _____ | e. Ge _____ |
| b. H_2O _____ | f. O _____ |
| c. O_2 _____ | g. Ca^{2+} _____ |
| d. Au^{3+} _____ | h. NH_3 _____ |

5. When fossil fuels are burned, carbon dioxide and water are produced. What elements must be contained in fossil fuels? (assume the oxygen comes from the air)

6. List three elements that are named for famous scientists.

7. Two substances were tested and were found to have the following chemical compositions.

<u>Substance A</u>	<u>Substance B</u>
73% oxygen	57% oxygen
27% carbon	43% carbon

Are these the same compound? Explain.
