

Name _____ Date _____ period _____

Count the elements in a compound

Objectives:

1. To learn that compounds are made of atoms from different elements
2. To learn how to identify and count the elements in a chemical formula

Procedures:

1. Count and separate the elements from the following formulas
2. Write the atoms of each element of the space provided

Examples:

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Sulfuric acid H_2SO_4</p> <p>Hydrogen (H) Sulfur (S) Oxygen (O)</p> <p>Amount of elements _____</p> | <p>Ammonium acetates $(NH_4)_2CH_3COO$</p> <p>Nitrogen (N) _____ (H) Carbon () _____ (O)</p> <p>Amount of elements _____</p> |
| <p>Caffeine $C_8H_{10}N_4O_2$</p> <p>_____ () _____ () _____ () _____ ()</p> <p>Amount of elements _____</p> | <p>Ammonium acetate $4NH_4CH_3COO$</p> <p>_____ () _____ () _____ () _____ ()</p> <p>Amount of elements _____</p> |

| Name of the compound and chemical formula | Amount of elements |
|-------------------------------------------|--------------------|
| Water H_2O | |
| Hydrogen peroxide H_2O_2 | |
| Ammonium sulfide $2(NH_4)_2S$ | |
| Sugar $C_6H_{12}O_6$ | |

| Name of the compound and chemical formula | Amount of elements |
|-------------------------------------------|--------------------|
| Terephthalic acid $C_6H_4(COOH)_2$ | |
| Ammonium $3NH_4HCO_3$ | |
| Ammonium hydroxide NH_4OH | |
| Cadmium hypochlorite $Cd(ClO)_2$ | |
| Sodium acetate $NaCH_3COO$ | |
| Potassium dichromate $K_2Cr_2O_7$ | |
| Halothane $C_2HBrClF_3$ | |
| Acetic acid $2CH_3CO(OH)_2$ | |
| Potassium acetate CH_3COOK | |
| Acetone $2(CH_3C)_3OCH_3$ | |