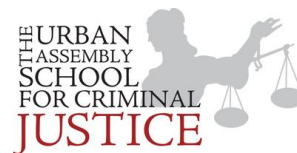


Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Chemistry ~ Ms. Hart**

**Class:**

Anions or Cations



### 3.2 HW Classifications of Matter

- 1) Classify each of the following as (a) element, (b) compound, (c) homogeneous mixture, (d) heterogeneous mixture.

Air _____	Ice _____	A cup of black coffee _____
Chlorine gas _____	Gasoline _____	Blood _____
Sugar _____	Cereal and milk _____	A bronze statue _____
Neon _____	Gold _____	Raw egg _____
Mushroom pizza _____	Zinc _____	Carbon Monoxide(CO) _____

- 2) The tap water in your home leaves behind deposits after evaporating. Is your tap water a heterogeneous mixture, a homogeneous mixture, a compound, or an element. Explain

- 3) Match the letter with the vocabulary word

\_\_\_\_\_ Element

\_\_\_\_\_ Compound

\_\_\_\_\_ Homogeneous Mixture

\_\_\_\_\_ Heterogeneous Mixture

a. A physical blend of two or more components

b. A mixture that is uniform throughout

c. Substance that can be separated into simpler substances only by chemical means

d. A mixture that is not uniform throughout

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Chemistry ~ Ms. Hart**

**Class:**

Anions or Cations



### 3.2 HW Classifications of Matter

- 2) Classify each of the following as (a) element, (b) compound, (c) homogeneous mixture, (d) heterogeneous mixture.

Air _____	Ice _____	A cup of black coffee _____
Chlorine gas _____	Gasoline _____	Blood _____
Sugar _____	Cereal and milk _____	A bronze statue _____
Neon _____	Gold _____	Raw egg _____
Mushroom pizza _____	Zinc _____	Carbon Monoxide(CO) _____

- 2) The tap water in your home leaves behind deposits after evaporating. Is your tap water a heterogeneous mixture, a homogeneous mixture, a compound, or an element. Explain

- 3) Match the letter with the vocabulary word

\_\_\_\_\_ Element

\_\_\_\_\_ Compound

\_\_\_\_\_ Homogeneous Mixture

\_\_\_\_\_ Heterogeneous Mixture

a. A physical blend of two or more components

b. A mixture that is uniform throughout

c. Substance that can be separated into simpler substances only by chemical means

d. A mixture that is not uniform throughout

- 4) \_\_\_\_\_ Which substance **CANNOT be** broken down into a simpler substance?
- 1) Oxygen ( $O_2$ )
  - 2) Carbon Monoxide (CO)
  - 3) Iron Oxide ( $Fe_2 O_3$ )
  - 4) Sodium Nitrate ( $NaNO_3$ )
- 5) \_\_\_\_\_ Which of the following can be broken down by a chemical change?
- 1) Nitrogen ( $N_2$ )
  - 2) Mercury (Hg)
  - 3) Sulfur (S)
  - 4) Calcium carbonate ( $CaCO_3$ )
- 6) \_\_\_\_\_ An example of a homogeneous mixture is
- 1) Sugar ( $C_6H_{12}O_6$ )
  - 2) Potassium (K)
  - 3) Gasoline
  - 4) Oil and sand
- 7) \_\_\_\_\_ Which is a characteristic of all mixtures?
- 1) They are homogeneous
  - 2) They are heterogeneous
  - 3) Their composition is a definite ratio
  - 4) Their composition can be varied

- 4) \_\_\_\_\_ Which substance **CANNOT be** broken down into a simpler substance?
- 1) Oxygen ( $O_2$ )
  - 2) Carbon Monoxide (CO)
  - 3) Iron Oxide ( $Fe_2 O_3$ )
  - 4) Sodium Nitrate ( $NaNO_3$ )
- 5) \_\_\_\_\_ Which of the following can be broken down by a chemical change?
- 1) Nitrogen ( $N_2$ )
  - 2) Mercury (Hg)
  - 3) Sulfur (S)
  - 4) Calcium carbonate ( $CaCO_3$ )
- 6) \_\_\_\_\_ An example of a homogeneous mixture is
- 1) Sugar ( $C_6H_{12}O_6$ )
  - 2) Potassium (K)
  - 3) Gasoline
  - 4) Oil and sand
- 7) \_\_\_\_\_ Which is a characteristic of all mixtures?
- 1) They are homogeneous
  - 2) They are heterogeneous
  - 3) Their composition is a definite ratio
  - 4) Their composition can be varied