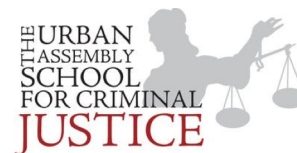


Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Chemistry** ~ Ms. Hart

**Class:**

Anions or Cations



### **6.1 – Grams Formula Mass**

1. The sum of the atomic masses of the atoms in one molecule of  $C_3H_6Br_2$  is called the
  - (1) formula mass
  - (2) isotopic mass
  - (3) percent abundance
  - (4) percent composition
2. The gram formula mass of  $NH_4Cl$  is
  - (1) 22.4 g/mole
  - (2) 28.0 g/mole
  - (3) 53.5 g/mole
  - (4) 95.5 g/mole
3. What is the gram formula mass of  $Na_2CO_3 \cdot 10H_2O$ ?
  - (1) 106 g
  - (2) 142 g
  - (3) 266 g
  - (4) 286 g
4. What is the gram formula mass of  $(NH_4)_2SO_4$ ?
  - (1) 66.0 g
  - (2) 94.0 g
  - (3) 114 g
  - (4) 132 g
5. What is the gram formula mass of  $K_2CO_3$ ?
  - (1) 138 g
  - (2) 106 g
  - (3) 99 g
  - (4) 67 g
6. What is the formula mass of  $Al_2(SO_4)_3$ ?
  - (1) 123
  - (2) 150
  - (3) 214
  - (4) 342
7. What is the gram formula mass of  $Mg(ClO_3)_2$ ?
  - (1) 107 g
  - (2) 142 g
  - (3) 174 g
  - (4) 191 g
8. What is the gram formula mass of  $(NH_4)_3PO_4$ ?
  - (1) 113 g
  - (2) 121 g
  - (3) 149 g
  - (4) 404 g

9. What is the gram formula mass of  $\text{Li}_2\text{SO}_4$ ?

- (1) 54 g
- (2) 55 g
- (3) 110 g
- (4) 206 g

10. What is the gram formula mass of  $\text{Ca}_3(\text{PO}_4)_2$ ?

- (1) 135 g/mol
- (2) 215 g/mol
- (3) 278 g/mol
- (4) 310. g/mol

11. Given two formulas representing the same compound:

Formula A  $\text{CH}_3$

Formula B  $\text{C}_2\text{H}_6$

Which statement describes these formulas?

- (1) Formulas A and B are both empirical.
- (2) Formulas A and B are both molecular.
- (3) Formula A is empirical, and formula B is molecular.
- (4) Formula A is molecular, and formula B is empirical.

12. Which is an empirical formula?

- (1)  $\text{CH}$
- (2)  $\text{C}_2\text{H}_2$
- (3)  $\text{C}_2\text{H}_4$
- (4)  $\text{C}_4\text{H}_8$

13. What is the empirical formula for a compound with the molecular formula  $\text{C}_6\text{H}_{12}\text{Cl}_2\text{O}_2$ ?

- (1)  $\text{CHClO}$
- (2)  $\text{CH}_2\text{ClO}$
- (3)  $\text{C}_3\text{H}_6\text{ClO}$
- (4)  $\text{C}_6\text{H}_{12}\text{Cl}_2\text{O}_2$

14. Which pair consists of a molecular formula and its corresponding empirical formula?

- (1)  $\text{C}_2\text{H}_2$  and  $\text{CH}_3\text{CH}_3$
- (2)  $\text{C}_6\text{H}_6$  and  $\text{C}_2\text{H}_2$
- (3)  $\text{P}_4\text{O}_{10}$  and  $\text{P}_2\text{O}_5$
- (4)  $\text{SO}_2$  and  $\text{SO}_3$

Answers:

1. (1)
2. (3)
3. (4)
4. (4)
5. (1)
6. (4)
7. (4)
8. (3)
9. (3)
10. (4)
11. (3)
12. (1)
13. (3)
14. (3)