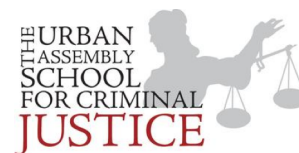


Name: \_\_\_\_\_ Date: \_\_\_\_\_

Chemistry ~ Ms. Hart Class: \_\_\_\_\_ Anions or Cations

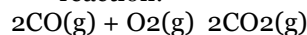


### 6.7 – Mole and Unit 6 Practice

- Given the balanced equation representing a reaction:  
 $\text{Mg(s)} + \text{Ni}^{2+}(\text{aq}) \rightarrow \text{Mg}^{2+}(\text{aq}) + \text{Ni(s)}$   
 What is the total number of moles of electrons lost by Mg(s) when 2.0 moles of electrons are gained by  $\text{Ni}^{2+}(\text{aq})$ ?  
 (1) 1.0 mol  
 (2) 2.0 mol  
 (3) 3.0 mol  
 (4) 4.0 mol

- Given the balanced equation representing a reaction:  
 $\text{C}_3\text{H}_8(\text{g}) + 5\text{O}_2(\text{g}) \rightarrow 3\text{CO}_2(\text{g}) + 4\text{H}_2\text{O}(\text{g})$   
 What is the total number of moles of  $\text{O}_2(\text{g})$  required for the complete combustion of 1.5 moles of  $\text{C}_3\text{H}_8(\text{g})$ ?  
 (1) .30 mol  
 (2) 1.5 mol  
 (3) 4.5 mol  
 (4) 7.5 mol

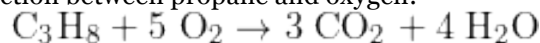
- Given the balanced equation representing a reaction:



What is the mole ratio of CO(g) to  $\text{CO}_2(\text{g})$  in this reaction?

- 1:1
- 1:2
- 2:1
- 3:2

- Given the balanced equation representing the reaction between propane and oxygen:

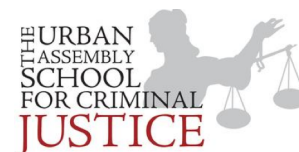


According to this equation, which ratio of oxygen to propane is correct?

- $\frac{5 \text{ grams O}_2}{1 \text{ gram C}_3\text{H}_8}$
- $\frac{1 \text{ mole C}_3\text{H}_8}{10 \text{ grams O}_2}$
- $\frac{11 \text{ grams C}_3\text{H}_8}{10 \text{ moles O}_2}$
- 11 moles  $\text{C}_3\text{H}_8$

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

Chemistry ~ Ms. Hart Class: \_\_\_\_\_ Anions or Cations

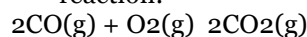


### 6.7 – Mole and Unit 6 Practice

- Given the balanced equation representing a reaction:  
 $\text{Mg(s)} + \text{Ni}^{2+}(\text{aq}) \rightarrow \text{Mg}^{2+}(\text{aq}) + \text{Ni(s)}$   
 What is the total number of moles of electrons lost by Mg(s) when 2.0 moles of electrons are gained by  $\text{Ni}^{2+}(\text{aq})$ ?  
 (1) 1.0 mol  
 (2) 2.0 mol  
 (3) 3.0 mol  
 (4) 4.0 mol

- Given the balanced equation representing a reaction:  
 $\text{C}_3\text{H}_8(\text{g}) + 5\text{O}_2(\text{g}) \rightarrow 3\text{CO}_2(\text{g}) + 4\text{H}_2\text{O}(\text{g})$   
 What is the total number of moles of  $\text{O}_2(\text{g})$  required for the complete combustion of 1.5 moles of  $\text{C}_3\text{H}_8(\text{g})$ ?  
 (1) .30 mol  
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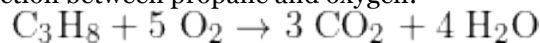
- Given the balanced equation representing a reaction:



What is the mole ratio of CO(g) to  $\text{CO}_2(\text{g})$  in this reaction?

- 1:1
- 1:2
- 2:1
- 3:2

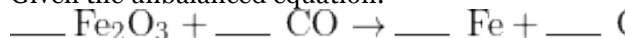
- Given the balanced equation representing the reaction between propane and oxygen:



According to this equation, which ratio of oxygen to propane is correct?

- $\frac{5 \text{ grams O}_2}{1 \text{ gram C}_3\text{H}_8}$
- $\frac{1 \text{ mole C}_3\text{H}_8}{10 \text{ grams O}_2}$
- $\frac{11 \text{ grams C}_3\text{H}_8}{10 \text{ moles O}_2}$
- 11 moles  $\text{C}_3\text{H}_8$

5. Given the unbalanced equation:



When the equation is correctly balanced using the smallest whole-number coefficients, what is the coefficient of CO?

- (1) 1
  - (2) 2
  - (3) 3
  - (4) 4
6. What is the total mass of 2.0 moles of H<sub>2</sub>(g)?
- (1) 1.0 g
  - (2) 0.0 g
  - (3) 2.0 g
  - (4) 1.5 g
7. What is the mass in grams of 2.0 moles of NO<sub>2</sub>?
- (1) 92
  - (2) 60.
  - (3) 46
  - (4) 30.
8. The total number of moles represented by 20 grams of CaCO<sub>3</sub> is
- (1) 1
  - (2) 2
  - (3) 0.1
  - (4) 0.2
9. A substance has an empirical formula of CH<sub>2</sub> and a molar mass of 56 grams per mole. The molecular formula for this compound is

- (1) CH<sub>2</sub>
- (2) C<sub>4</sub>H<sub>6</sub>
- (3) C<sub>4</sub>H<sub>8</sub>
- (4) C<sub>8</sub>H<sub>4</sub>

10. What is the gram-formula mass of (NH<sub>4</sub>)<sub>3</sub>PO<sub>4</sub>?

- (1) 112 g/mol
- (2) 121 g/mol
- (3) 149 g/mol
- (4) 242 g/mol

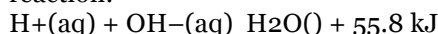
11. The molar mass of Ba(OH)<sub>2</sub> is

- (1) 154.3 g
- (2) 155.3 g
- (3) 171.3 g
- (4) 308.6 g

12. What is the percent composition by mass of sulfur in the compound MgSO<sub>4</sub> (gram-formula mass = 120. grams per mole)?

- (1) 20%
- (2) 27%
- (3) 46%
- (4) 53%

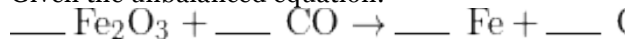
13. Given the balanced equation representing a reaction:



In this reaction there is conservation of

- (1) mass, only
- (2) mass and charge, only
- (3) mass and energy, only
- (4) mass, charge, and energy

5. Given the unbalanced equation:



When the equation is correctly balanced using the smallest whole-number coefficients, what is the coefficient of CO?

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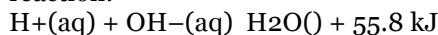
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