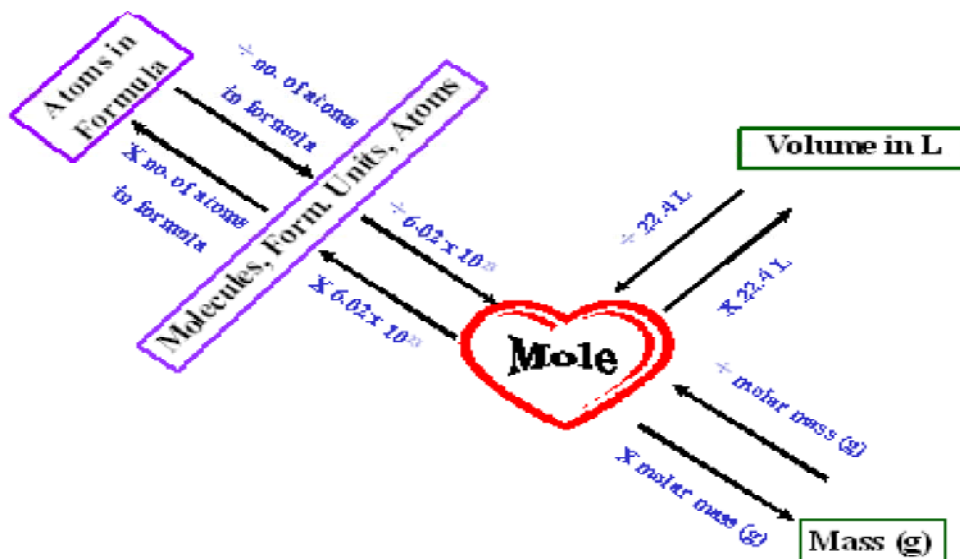


Practice test chapter 10

Multiple Choice - Choose the correct answer for the following questions. You may write on the test, only your answers on the scantron will be graded.

*You will have questions over past chapters 1,2,3,4,25, 5, 6, 7, 8 and lots of naming from chapter 9.



- ___ 1. How many moles of CH_4 are contained in 96.0 grams of CH_4 ?
- | | |
|---------|---------|
| a. 3.00 | c. 6.00 |
| b. 12.0 | d. 16.0 |
- ___ 2. What type of representative particle is H_2O ?
- | | |
|-----------------|---------|
| a. formula unit | c. atom |
| b. molecule | |
- ___ 3. Look at the compound below. How many total atoms are present for each element?
- $\text{Zn}(\text{ClO})_2$
- | | |
|------|------|
| a. 4 | c. 6 |
| b. 5 | d. 3 |
- ___ 4. How many atoms are contained in 97.6 g of silver?
- | | |
|--------------------------|--------------------------|
| a. 5.45×10^{23} | c. 1.20×10^{24} |
| b. 3.01×10^{23} | d. 1.10×10^{23} |
- ___ 5. Name the following Cl_2O_7
- | | |
|--------------------------|-------------------------|
| a. Perchlorate | c. dichlorine hexoxide |
| b. dichlorine heptaoxide | d. dichlorine heptoxide |
- ___ 6. What is the gram formula mass of chromium (III) oxalate?
- | | |
|--------------|--------------|
| a. 65 g/mol | c. 396 g/mol |
| b. 192 g/mol | d. 368 g/mol |

Name: _____

ID: A

- _____ 7. Choose the correct formula for Ammonium oxalate.
- | | |
|--|--|
| a. $\text{NH}_4\text{C}_2\text{O}_4$ | c. $\text{C}_2\text{O}_4(\text{NH}_4)_2$ |
| b. $(\text{NH}_4)_2\text{C}_2\text{O}_4$ | d. $(\text{NH}_4)_2\text{C}_2\text{H}_3\text{O}_2$ |
- _____ 8. What is the density of 1 mole of CO_2 gas at STP?
- | | |
|-------------|---------------------------|
| a. 1.34 g/L | d. 0.49 g/L |
| b. 0.4 g/L | e. 0.75 g/L ²² |
| c. 1.96 g/L | |
- _____ 9. What is the volume of 1 mole of Chlorine gas at standard temperature and pressure?
- | | |
|-----------|----------------------------|
| a. 22.4 L | c. 6.02×10^{23} L |
| b. 12.2 L | d. 67.2 L |
- _____ 10. Choose the correct name for HF.
- | | |
|------------------------------|--------------------------|
| a. hydrogen fluoride acid | c. hydrofluoric acid |
| b. monohydrogen monofluoride | d. hydrogen monofluoride |
- _____ 11. Calculate the number of molecules in 60.0 g of NO_2 .
- | | |
|--------------------------|-------------------------|
| a. 7.85×10^{23} | c. 7.9×10^{24} |
| b. 1.20×10^{24} | d. 3.6×10^{25} |
- _____ 12. Which compound/s represent a molecular compound?
- | | |
|------------------|-------------------|
| a. CrO | c. KNO_2 |
| b. CH_4 | d. LiF |
- _____ 13. How many oxygen atoms are there in 1.75 mol of Calcium phosphite?
Hint: First write the formula for calcium dichromate.
- | | |
|---------------------------------------|------------------------------------|
| a. 3.01×10^{24} oxygen atoms | c. 7 oxygen atoms |
| b. 6×10^{24} oxygen atoms | d. 6×10^{25} oxygen atoms |
- _____ 14. NaCl can be classified as what type of compound?
- | | |
|-----------|--------------|
| a. ionic | c. molecular |
| b. acidic | |
- _____ 15. SO_2 can be classified as what type of compound?
- | | |
|-----------|-------------------|
| a. ionic | c. polyatomic ion |
| b. acidic | d. molecular |
- _____ 16. How many atoms of chromium are there given 13 grams of chromium?
- | | |
|-------------------------|-------------------------|
| a. 1.5×10^{23} | c. 3.3×10^{23} |
| b. 1.9×10^{26} | d. 2.4×10^{24} |
- _____ 17. Which of the following is a monatomic gas at STP?
- | | |
|-------------|-------------|
| a. Chlorine | c. Fluorine |
| b. Argon | d. Nitrogen |
- _____ 18. What is the volume of a 200-gram sample of nitrogen gas at STP?
- | | |
|---------------|---------------|
| a. 320-liters | d. 125-liters |
| b. 250-liters | e. 8.9-liters |
| c. 160-liters | |
- _____ 19. How many representative particles are in 1.50×10^{23} moles of nitrogen dioxide?
- | | |
|--|-----------------------------------|
| a. 8.00×10^{-22} formula units. | d. 1.50×10^{23} atom |
| b. 0.208 molecule | e. 9.03×10^{46} molecule |
| c. 1.25×10^{21} formula units. | |

Name: _____

ID: A

- _____ 20. What is the mass of a 55-Liter sample of krypton gas at STP?
- a. 205-grams
 - b. 250-grams
 - c. 550-grams
 - d. 610-grams
- _____ 21. What is the correct formula for copper (I) peroxide?
- a. CuO
 - b. CuO₂
 - c. Cu₂O
 - d. Cu₂O₂
- _____ 22. What is the percent composition of chromium in Barium chromate?
- a. 4.87%
 - b. 9.47%
 - c. 20.5%
 - d. 25.2%
- _____ 23. What are the correct values for STP?
- a. 1°C and 101.3 kPa
 - b. 0°C and 101.3 kPa
 - c. 0°C and 22.4 kPa
 - d. 0°C and 100 kPa

Multiple Response

Identify one or more choices that best complete the statement or answer the question.

- _____ 24. Which of the following is NOT classified correctly as a representative particle?
- a. SO = molecular
 - b. Cu = formula unit
 - c. (NH₄)₂SiO₃ = molecule
 - d. O₂ = atom

Practice test chapter 10
Answer Section

MULTIPLE CHOICE

- | | |
|------------|--------|
| 1. ANS: C | PTS: 1 |
| 2. ANS: B | PTS: 1 |
| 3. ANS: B | PTS: 1 |
| 4. ANS: A | PTS: 1 |
| 5. ANS: D | PTS: 1 |
| 6. ANS: D | PTS: 1 |
| 7. ANS: B | PTS: 1 |
| 8. ANS: C | PTS: 1 |
| 9. ANS: A | PTS: 1 |
| 10. ANS: C | PTS: 1 |
| 11. ANS: A | PTS: 1 |
| 12. ANS: B | PTS: 1 |
| 13. ANS: B | PTS: 1 |
| 14. ANS: A | PTS: 1 |
| 15. ANS: D | PTS: 1 |
| 16. ANS: A | PTS: 1 |
| 17. ANS: B | PTS: 1 |
| 18. ANS: C | PTS: 1 |
| 19. ANS: E | PTS: 1 |
| 20. ANS: A | PTS: 1 |
| 21. ANS: D | |
| ST 2A, 2B | |
| PTS: 1 | |
| 22. ANS: C | PTS: 1 |
| 23. ANS: B | PTS: 1 |

MULTIPLE RESPONSE

- | | |
|------------------|--------|
| 24. ANS: B, C, D | PTS: 1 |
|------------------|--------|