Which particle has approximately the same mass as a proton? (A) alpha (C) electron (B) hets (C) and (C) a	Jnit 2 Atomic Theory & Structure 8. Which of the following particles has the <i>least</i> mass? (A) an electron (A) an electron (C) a hyrogen atom (B) a region (D) a particutor	 Atoms of ¹⁴O, ¹³O, and ¹⁴O have the same number of (A)neutrons, but a different number of protons (B) protons, but a different number of neutrons (C) protons, but a different number of electrons 	 Which substomic particles have a mass of approximately 1 atomic mass unit each? (A) proton and electron (B) proton and newtron (C) neutron and positron
 (c) but (c) matching (c) production Experimental evidence indicates that the nucleus of an atom (A) contains most of the mass of the atom (B) contains a small percentage of the mass of the atom (C) has no charge (D) has a negative charge The atomic number of an atom is always equal to the total number of 	 (c) a proton (c) a network (c) a network (c) and (c)	 (D) electrons, but a different number of protons 16. All the isotopes of a given atom have (A) the same mass number and the same atomic number (B) the same mass number but different atomic numbers (C) different mass numbers but the same atomic number (D) different mass numbers and different atomic number 	 (D) electron and positron 19. Which statement concerning elements is true? (A) Different elements must have different number of isotopes. (B) Different elements must have different numbers of neutrons. (C) All atoms of a given clement must have the same mass number. (D) All atoms of a given element must have the same atomic number.
 (A) neutrons in the nucleus (B) protons in the nucleus (C) neutrons plus protons in the atom (D) protons plus electrons in the atom 4. An atom that contains 35 protons, 45 neutrons, and 35 electrons has an atomic number of (A) 35 (C) 80 (B) 45 (D) 115 	 The number of protons in an atom of ³/₄H is (A) 1 (C) 3 (B) 2 (D) 4 The nucleus of an atom of ⁵/₂T² contains (A) 53 neutrons and 127 protons (B) 53 protons and 127 neutrons (C) 53 protons and 74 neutrons (D) 54 protons and 74 neutrons 	 17. If the nucleus of an atom is represented as ²/₁₇X, the atom is (A)Na (C)Mg (B) A1 (D)Br 	20. The atomic mass of an element is defined as the weighted average mass of that element's (A) most shundani isotope (B) least abundani isotope (C) naturuly occurring isotopes (D) radioactive isotopes
 5. Which atom has a nucleus that contains 13 protons and 14 neutrons? (A) Mg 'CC (A) (B) Be (D) N 6. What is the total number of electrons in a neutral atom of Juorine? 	 (A) 19 protons and 21 neutrons (B) 19 protons and 42 neutrons (C) 20 protons and 42 neutrons (D) 23 protons and 19 neutrons (D) 23 protons and 19 neutrons 14. An experiment in which alpha particles were 		
 (A) 9 (C) 19 (B) 10 (D) 28 7. What is the mass number of an atom which contains 21 electrons, 21 protons, and 24 neutrons? (A) 21 (C) 45 (B) 42 (D) 66 	used to bomhard thin sheets of gold foil led to the conclusion that an atom is composed mostly of (A) empty space and has a small, negatively charged nucleus (B) empty space and has a small, positively charged nucleus (C) a large, dense, positively charged nucleus (D) a large, dense, positively charged nucleus	3. A base of the second sec	
	<u> </u>		
Chemistry- Unit 2	28	Chemistry- Unit 2	29
Chemistry- Unit 2	28	Chemistry- Unit 2	29
Unit 2 Unit 3 - 1. What is the total number of occupied principal energy levels in an atom of neon in the ground string and levels in an atom of neon in the ground string and levels in an atom of neon in the ground string (A) 1 (C) 3 (B) 2 (O) 4 Vinite demonstration of the string atom of neon principal energy level? (A) N (C) As (B) P (O) S5 3. The principal quantum number of the outermost electron	Electrons Chemistry 9. Which atom in the ground state has three unpaired electrons in the subermost principal energy level? (A) Li (A) Li (C) N (B) B (D) Ne (B) B (D) Ne (C) Mit is the electron configuration of a neutral atom in the ground state with a total of six valence electrons? (A) 112 ² /22 ² /21 ⁴ (B) 12 ² /22 ² /21 ⁴ (C) 12 ² /22 ² /21 ⁴ (D) 12 ² /22 ² /21 ² /32 ⁴ /32 ⁴ /31 ⁴	Chemistry- Unit 2 17. Which electron transition represents the release of energy? (A) 1510 2p (C) 3p to 15 (B) 2s to 2p (D) 2p to 3s 18. Which orbital notation correctly represents the outermost principal energy level of a nitrogen atom in the ground state? (A) S T T T T T T T T T T	 During a flame test, lons of a specific metal are heated in the flame of a gas burner. A characteristic color of light is emitted by these ions in the flame when the electrons (A) gain energy as they return to lower energy levels (B) gain energy as they return to lower energy levels (C) emit energy as they return to lower energy levels (C) emit energy as they return to lower energy levels (C) emit energy as they return to lower energy levels (D) emit energy as they return to lower energy levels (D) emit energy as they return to lower energy levels (D) emit energy as they more to higher energy levels (D) emit energy as they more to higher energy levels (D) end energy levels (shells) (C) neutions in the muchans
Chemistry- Unit 2 1. What is the total number of occupied principal energy levels in an atom of neon in the ground state? (A) 1 (C) 3 (B) 2 (D) 4 2. Which element has alons will notly one completely filled principal energy Yeve? (A) N (C) As (B) P (D) Sb 3. The principal quantum number of the outermost electron of an atom in the ground state is $n = 3$. What is the total number of occupied principal energy levels contained in this atom? (A) 7 (C) 3 (B) 2 (D) 4 4. As an electron in a hydrogen atom moves from the	Electrons Chemistry 9. Which atom in the ground state has three unpaired electrons in its outernost principal energy level? (A) Li (C) N (A) Li (C) N (B) B (D) Ne 10. Which is the electron configuration of a neutral atom in the ground state with a total of six valence electrons? (A) $132^{-2}2^{2}p^{4}$ (B) # $122^{-2}2p^{4}$ (D) Ne 11. Which principal energy level has a maximum of three sublevels? (A) $132^{-2}2p^{4}$ (D) 14 12. What is the total number of valence electrons in an atom	Chemistry- Unit 2 17. Which electron transition represents the release of energy? (A) 1s to 3p (C) 3p to 1s (B) 2s 1o 2p (C) 2p to 3s 18. Which orbital notation correctly represents the outermost state? (A) $\frac{1}{100} \frac{1}{100} $	 During a flame test, lons of a specific metal are heated in the flame of a gas burner. A characteristic color of light is emitted by these ions in the flame when the elections (A) gain energy as they thrun to lower energy levels (B) gain energy as they thrun to lower energy levels (C) emit energy as they move to higher energy levels (D) emit energy as they move to higher energy levels (D) emit energy as they move to higher energy levels (D) emit energy as they move to higher energy levels (D) emit energy as they move to higher energy levels (D) emit energy as they move to higher energy levels (D) emit energy as they move to higher energy levels (D) entit call calls all how the same number of the Period energy levels (shells) (E) energine energy levels (shells) (C) neutrons in the nucleus (C) electrons in the valance shell
Chemistry- Unit 2 Unit 3 What is the total number of occupied principal energy levels in an atom of neon in the ground state? (A) 1 (C) 3 (B) 2 (D) 4 (A) N (C) As (B) P (D) 55 (B) P (D) 55 (C) As (B) P (D) 55 (C) As (C) A	Electrons Chemistry 9. Which atom in the ground state has three upgaled electrons in its outermost principal energy level? (A) Li (A) Li (C) N (B) B (D) Ne 10. Which is the electron configuration of a neutral atom in the ground state with a total of six vience electrons? (A) Li (C) N (B) B (D) Ne 10. Which is the electron configuration of a neutral atom in the ground state with a total of six vience electrons? (A) 122*22pt (D) 122*22pt (D) 122*22pt (E) 122*22pt (E) 122*22pt (D) 122*22pt (E) 122*22pt (E) 122*22pt (I) 12*22*2pt (I) 12*22*2pt (I) 12*22*2pt (I) 12*22*2pt (I) 12*22*2pt (I) 12*22*2pt (I) 12*2*2pt (I) 12*2*2pt (I) 12*2*2pt (I) 2*0 (I) 14*10*10*10*10*10*10*10*10*10*10*10*10*10*	Chemistry- Unit 2 17. Which electron transition represents the release of energy? (A) Is to 3p (C) 3p to 1s (B) 2s to 2p (D) 2p to 3s 18. Which orbital indison correctly represents the outermost profession energy level of a nitrogen atom in the ground state? (A) S P P P P (B) S P P P P P (C) S P P P P P (C) S P P P P P P (C) S P P P P P P P (C) S P P P P P P P (C) S P	 During a finme test, lons of a specific metal are heated in termine of up as burner. A characterisfic color of light is emitted by these ions in the fame when the electrons (A) gain energy as they return to baser energy twels (B) gain energy as they return to baser energy twels (C) emit energy as they return to baser energy twels (C) emit energy as they return to baser energy twels (C) emit energy as they return to baser energy twels (C) emit energy as they return to baser energy twels (C) emit energy as they move to higher energy twels (C) emit energy as they move to higher energy twels (C) emit energy exits (shells) (C) networks in the ruleus (C) electrons in the ruleus (C) electrons in the ruleus

Chemistry- Unit 3

What is the maximum number of electrons in the third shell of an atom?
 (A) 6 (C) 3
 (B) 9 (D) 18

7. Which electron configuration represents an atom in an excited state? (a) $15^{2}2^{2}2^{2}p^{2}5p^{1}$ (b) $15^{2}2^{2}2^{2}p^{4}3z^{3}p^{2}$ (c) $1z^{2}2^{2}2p^{4}3z^{3}p^{2}$ (d) $1z^{2}2z^{2}p^{4}3z^{3}z^{2}$

8. The total number of d orbitals in the third principal energy level is
(A) 1
(C) 3
(B) 5
(D) 7

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nd state contains a partially filled

(C) potassium (D) aluminum

14. The maximum number of electrons that a single orbital of the 3d sublevel may contain is (A) 5 (C) 3 (B) 2 (D) 4

 15. Which element has a completely filled third principal energy level?

 (A) Ar
 (C) Fe

 (B) N
 (D) Zn

Which atom in the 3p orbital?
 (A) argon
 (B) celcium

Chemistry- Unit 3

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1. The element in Period 2 with the largest atomic radius is (A) a halogen (C) an alkali metal (B) a noble gas (D) an alkaline earth meta	Unit 4 Periodic Table and Trends 8. The table below shows some properties of elements A, B , C, and D.	 When a sodium atom becomes an ion, the size of the atom (A) decreases by gaining an electron (B) decreases by losing an electron (C) increases by atomic an electron 	 Which diagram correctly shows the relationship between electronegativity and atomic number for the elements of Period 37 (A) A (A) A
2. Which sequence of atomic numbers represents element which have similar chemical properties? (A) 19, 23, 30, 36 (C) 3, 12, 21, 40 (B) 9, 16, 33, 50 (D) 4, 20, 38, 88	S Element Ionization Electronagativity element Esergio Ionization el la constanta de Electronagativity el element al de Electricity A Iow Iow Iow Iow Iow	(D) increases by losing an electron 15. Which element has an atomic radius that is greater than its ionic radius? (A) S (C) F	Electroned in the second secon
 All of the atoms of the elements in Period 2 have the same number of (A) protons (B) neutrons (C) valance electrons 	C high high tow D high high high Which element is most likely a nonmetal?	(B) K (D) O 16. Elements that readily gain electrons land to have (A) high ionization energy and high electronegalivity (B) high ionization energy and low electronegalivity	
(D) occupied energy levels (shells) In which classification is an element placed if the outermost 3 sublevels of its atoms have a ground state electron configuration of 3p ⁶ 3d ⁵ 4s ² ?	(A) A (C) C (B) B (D) D 9. Which of these metals loses electrons most readily? (A) calcium (C) potassium	 (C) low ionization energy and tow electronegativity (D) low ionization energy and high electronegativity (T) Which element in Period 3 has the greatest tendency to gain electrons? (A) Lio (C) CI 	Abomic Number
(A) alkaline earth metals (C) metalloids (semimetals (B) transition metals (D) nonmetals Low ionization energies are most characteristic of atoms that are	 (B) magnesium (D) sodium 10. Which sequence correctly places the elements in order of increasing ionization energy? (A) H → Li → N^{ia} → K (C) O → S → Se → Te 	(A) NB (D) CI (B) Si (D) Ar 18. Which sequence of elements is arranged in order of decreasing adomic radir? (A) A SI, P (C) CI Br 1	Betranda they
(H) Intellines (D) Intellinous (B) nonmetals (D) noble gases in a given period of the Periodic Table, the element with the lowest first ionization energy is always in (A) Grown 1 (C) Grown 7	(B) 1→ B1→ C1→ F (U) H→ B0→ A1→ Ga 11. Which of the following particles has the smellest radius? (A) Na ⁶ (B) K ⁶	(B) U, Na, K (D) N, C, B	Atomic Number ►
(B) Group 2 (D) Group 18 (B) Group 2 (D) Group 18 As the atoms of the elements in Group 1 are considered in order from top to bottom, compared to the ionization energy of the atom above it, the ionization energy of	(C) Na ⁺ (D) K ⁺ 12. Which atom has the strongest attraction for electrons? (A) C1 (C) Br (C) C (C) Br	and a second sec	Atomic Number
each successive atom (A) decreases (C) remains the same (B) increases	(c) F (c)		20. Within Period 2 of the Periodic Table, as the atomic number increases, the atomic radius generally (A) decreases (C) remains the same
	(A) neutrons in the nucleus (B) electrons in the outermost shell (C) unpaied electrons (D) principal energy levels (shells)	an dari ang dari ang	(B) increases
Iry- Unit 4 DRA	FT 19	Chemistry- Unit 4 DRAF	FT 20
try- Unit 4 DRA Which formula represents an jonic compound? A)NaCl (C) HCl B)N ₂ O (D)H ₂ O	FT 19 <u>Init 5 Bonding</u> 10. Element <i>M</i> is a metal and its chloride has the formula <i>M</i> Cl ₂ . To which group of the Periodic Table does element <i>M</i> most likely belong? (A) 1 (C) 15	Chemistry- Unit 4 DRAF 19. When a potassium atom reacts with bromine, the potassium atom will (A)lose only 1 electron (B) lose 2 electrons (D) gain 2 electrons	T 20 20. What is the formula of nitrogen (D) oxide? (A)NO (C)N ₂ O (B)NO ₂ (D)N ₄ O ₄
try- Unit 4 DRA Which formula represents an ionic compound? (A)NaCl (C)HCl B)N ₂ O (D)H ₂ O Which formula correctly represents the compound calcium hydroxide? A)CaOH (C)CaOH ₂ B)Ca ₂ OH (D)Ca(OH) ₂	FT 19 Unit 5 Bonding 10. Element <i>M</i> is a metal and its chloride has the formula <i>A</i> (<i>U</i> , To which group of the Periodic Table does element <i>M</i> most likely belong? (A)1 (C) 15 (B)2 (D)17 11. What is the correct name of the compound with the formula NH ₄ NO ₂ ? (A)amonia hitria (C) amonia nitrate	Chemistry- Unit 4 DRAF	ET 20
Iny- Unit 4 DRA Which formula represents an ionic compound? A)NeCl (C)HCl B)N ₂ O (D)H ₂ O Which formula correctly represents the ompound calcium hydroxide? A)CaOH (C)CaOH ₂ Which metal will form a compound with the eneral formula M ₂ CO ₂ when it combines with carbonate ion? A)Derp(ilium (C) calcium B)duminum (D)lithium	FT 19 Unit 5 Bonding 10. Element <i>M</i> is a metal and its chloride has the formula <i>A</i> (C). To which group of the Periodic Table does element <i>M</i> most likely belong? (A) 1 (C) 15 (B) 2 (D) 17 11. What is the correct name of the compound with the formula NR ₁ NO ₂ ? (A) annoniun nitrite (C) annonia nitrate (B) annoniun nitrite (C) annonia nitrate (B) annoniun nitrite (C) Ns Br (A)Nis, Br (C) Ns Br	Chemistry- Unit 4 DRAF	FT 20
try- Unit 4 DRA Which formula represents an ionic compound? A)NeCl (C)HCl B)N ₂ O (D)H ₂ O Which formula correctly represents the ompound ealcium hydroxide? A)CaOH (D)Ca(OH ₂) Vhich metal will form a compound with the eneral formula M ₂ CO ₂ when it combines with carbonate ion? A)Deryllium (C) calcium B) aluminum (D) Hithum Which is the formula for magnesium sulfide? A)MgS (C) MnS B)MgSO ₃ (D)MnSO ₃	FT 19 Unit 5 Bonding 10. Element M is a metal and its chloride has the formula ACL, To which group of the Periodic Table does element M most likely belong? (A) 1 (C) 15 (B) 2 (D) 17 11. What is the correct name of the compound with the formula NR, NO, ? (A) amonium nitrite (D) ammonium nitrite (A) The chemical formula for nickel (I) bromide is (A)Ni, Br (C) Na, Br (A) NiBry (D) NBry 13. Atoms of metals tend to (A) lose electrons and form negative ions (D) lose electrons and form negative ions (D) lose cleaters and form negative ions (D) lose cleaters and form negative ions (D) lose cleaters and form negative ions <ld>(D) lose cleaters and form negative ions <ld>(D) lose cleaters and form negative ions <ld>(D) lose cleaters and form negative ions <ld>(D) lose cleaters and form negative ions <ld>(D) lose cleaters and form negative ions <ld>(D) lose cleaters and form negative ions</ld></ld></ld></ld></ld></ld>	Chemistry- Unit 4 DRAF	FT 20
try- Unit 4 DRA Which formula represents an ionic compound? A)NeC (C)HC B)N ₂ O (D)H ₂ O Which formula correctly represents the compound ealcium hydroxide? A)CaOH (D)Ca(OH), B)CayOH (D)Ca(OH), Which metal will form a compound with the eneral formula M ₂ CO ₂ when it combines with carbonate ion? A)Deryllham (C) calclum, B) aluminum (D) lithium Which is the formula for magnesium sulfide? A)MgS (D) MnSO, ince correct formula for calcium phosphate is a)Ca(PO), B)CayOQ, (D)Ca(PO), What is the correct name of Fe ₂ O ₂ ?	FT 19 Unit 5 Bonding 10. Element M is a metal and its chloride has the formula ACL, To which group of the Periodic Table does element M most likely belong? (A) 1 (C) 15 (B) 2 (D) 17 11. What is the correct name of the compound with the formula NRINO?; (A) 1 (C) 15 (B) 2 (D) 17 13. What is the correct name of the compound with the formula for nickel (D) bromide is (A) Ni₂Br (D) NBr₅ 14. Atoms of metals form logative ions (B) lose electrons and form negative ions (D) logat electrons and form negative ions (D) gain electrons and form negative ions (D) gain electrons and form negative ions (D) gain electrons and form negative ions (D) spate negative nodes with phosphorus? (A) Which is the formula for the compound that forms when magnesium bonds with phosphorus? (A) Mage² (A) Mage² (A) Mage² (A) Mage² (B) Mage² (A) Mage² (A) Mage² 	Chemistry- Unit 4 DRAF	20. What is the formula of nitrogen (Π) oxide? (Δ)NO2 (C)N3O (B)NO2 (D)N3O4
try- Unit 4 DRA Which formula represents an ionic compound? A)NeCl (C)HCl B)N ₂ O (D)H ₂ O Which formula correctly represents the compound calcium hydroxide? A)CaOH (C) CaOH ₂ B)CaOH (C) CaOH ₂ B)CaOH (C) CaOH ₂ B)CaOH (C) CaOH ₂ B)CaOH (D)Ca(C)H ₃ CO Which metal will form a compound with the eneral formula M ₂ CO ₃ when it combines with carbonate ion? A)Deryllium (C) calcium B) aluminum (D) lithium Which is the formula for magnesium suffate? A)MgSO (D) MnSO ₃ The correct formula for calcium phosphate is A)Ca ₂ O ₄ O ₂ , (C) Ca ₃ P ₂ B)Ca ₃ O(C ₃), (D)Ca ₃ P(O ₂), What is the correct name of F ₂ O ₃ ? A)tron (I) oxide (C) iron (II) oxide B) iron (II) oxide (C) iron (II) oxide b) iron (II) oxide (C) iron (III) oxide b) iron (I) oxide (C) iron (III) oxide (C) iron (III) oxide b) iron (I) oxide (C	FT 19 Unit 5 Bonding 10. Element M is a metal and its chloride has the formula A/CL, To which group of the Periodic Table does element M most likely belong? (A) I (C) 15 (B) 2 (D) 17 (A) Matti si the correct name of the compound with the formula NN_1NO₂? (A) C, To which group of the Periodic Table does element M most likely belong? (A) I (C) 15 (B) 2 (D) 17 11. What is the correct name of the compound with the formula NN_1NO₂? (A) ammonia nitrite (D) sammonia nitrate (B) annonium nitrite (D) Sharp (D) NBF₃ (D) Sharp megative ions (D) gain electrons and form negative ions (D) gain electrons and form negative ions (D) gain electrons and form negative ions (D) MgP₂ (D) MgP₂ (D) MgP₂ (D) MgP₂ (D) MgP₂ (D) MgP₃ (D) MgP₃<td>Chemistry-Unit 4 DRAF 19. When a potassium atom reacts with bromine, the potassium atom will (A)lose only 1 electron (C) gain only 1 electron (B) lose 2 electrons (D) gain 2 electrons</td><td>= T 20</td>	Chemistry-Unit 4 DRAF 19. When a potassium atom reacts with bromine, the potassium atom will (A)lose only 1 electron (C) gain only 1 electron (B) lose 2 electrons (D) gain 2 electrons	= T 20
try- Unit 4 DRA Which formula represents an ionic compound? A)NaCl (C)HCl B)N ₂ O (D)H ₂ O Which formula correctly represents the compound calcium hydroxide? A)CaOH (C)CaOH ₂ Mich metal will form a compound with the general formula M ₂ CO ₂ when it combines with emborate ion? A)MgSO (D)HfMum B)aluminum (D)HtMum Which is the formula for magnesium suffict? A)MgSO (D)MgSO ₃ The correct formula for calcium phosphate is A)Ca ₂ OP ₄ (C)Ca ₂ P ₂ - B)Ca ₂ OP ₄ (C)Ca ₂ P ₂ - B)Ca ₂ OP ₄ (C)Ca ₃ P ₂ O ₄ What is the formula for calcium phosphate is A)Ca ₂ O ₄ (C)Ca ₃ P ₂ - B)Ca ₂ OP ₄ (C)Ca ₃ P ₂ O ₄ (D)Iron (I) oxide (C) iron (II) oxide B)inon (II) oxide? (D)Iron (V) oxide B)NaSO ₃ (D)Na ₅ SO ₃ Vhich formula correct prepresents the omposition of iron (III) oxide? A)FeO ₄ (C) Fe ₅ O	FT 19 Init 5 Bonding 10. Element M is a metal and its chloride has the formula MCL, To which group of the Periodic Table does element M most likely belong? (A) 1 (A) 1 (C) 15 (B) 2 (D) 17 11. What is the correct name of the compound with the formula NH_NO_2; (A) ammonia nitrite (B) ammonia nitrite (C) ammonia nitrate (B) marmonia nitrite (C) Marmonia nitrate (B) marmonian nitrite (C) N_BBr (B) NiBr_2 (D) NBr_5 13. Atoms of metals for nickel (D) bromide is (A) Nig.Pr (D) gain electrons and form negative ions (D) gain electrons and form positive ions (D) gain electrons and form positive ions (D) gain electrons and form positive ions (D) which is the formula for the compound that forms when magnesium bonds with phosphorus? (A) Mg.Pr (A) Mig.Pr (C) Mag.Pr (B) Mide 2 (D) MCI (B) LiCl (D) KCl 13. Atoms of norm for the compound that forms when magnesium bonds with phosphorus? (A) Mig.Pr (C) Mag.Pr (B) Mide 2 (D) McI: (D) LiCl (D) KCl 14. Atoms of norm for NO, 5 is	Chemistry-Unit 4 DRAF 19. When a potassium atom reacts with bromine, the potassium atom will (A)Ose only 1 electron (C) gain only 1 electron (B)Ose 2 electrons (D) gain 2 electrons	20. What is the formula of nitrogen (Π) oxide? (A) NO (C) N,O (B) NO ₂ (D) N,O,
try- Unit 4 DRA Which formula represents an ionic compound? A)NaCl (C)HCl B)N ₂ O (D)H ₂ O Which formula correctly represents the compound ealcium hydroxide? A)CaOH (C)CaOH ₂ Which formula will form a compound with the eneral formula A_{CO} (Marking) B)CaOH (C)CaOH ₂ Which netal will form a compound with the eneral formula A_{CO} (Marking) B)CaOH (C)CaOH ₂ Which netal will form a compound with the eneral formula A_{CO} (C) CaOH ₂ B)CaOH (C)CaOH ₂ Which netal will form a compound with the eneral formula A_{CO} (C) CaOH ₂ B)Ca ₂ OH (C)CaOH ₂ Which is the formula for magnesium sulfide? A)MgS (C) MarSO ₃ The correct formula for calcium phoses is A)CaPO ₄ (C)Ca ₂ S ₂ B)Ca ₂ (PO ₄) (D)Ca ₃ (PO ₄). What is the correct name of Fe ₂ O ₃ ? A)Iron (I) oxide (C) Iron (II) oxide B)Iron (I) oxide (C) Iron (II) oxide Which formula correctly represents the supposition of iron (III) oxide? A)IFeO ₃ (C) Fe ₅ O ₃ Which formula correctly represents the supposition of iron (III) oxide? A)FeO ₃ (D) Fe ₅ O ₃ When the the correct and the formula the formula formed by <i>M</i> and xween?	FT 19 10. Element M is a metal and its chloride has the formula A/Ci, To which group of the Periodic Table does element M most likely belong? (A) [0] (C) 15 10. Blement M is a metal and its chloride has the formula A/Ci, To which group of the Periodic Table does element M most likely belong? (A) [0] (C) 15 10. Mini is the correct name of the compound with the formula NI_NO_? (A) [0] (C) 15 11. What is the correct name of the compound with the formula NI_NO_? (A) ammonia nitrite (B) ammonia nitrite (C) ammonia nitrate (B) ammonium nitrite (D) ammonium nitrate 12. The chemical formula for nickel (ID) bromide is (A) Nis.Br (A) lose electrons and form negative ions (D) gain electrons and form positive ions (D) gain electrons and form positive ions (D) gain electrons and form positive ions 13. Which is the formula for the compound that forms when magnesium bonds with phosphorus? (A) Mig.P_2 (A) HG (C) N&CI (D) McG.P_2 13. Which is the formula for the compound that forms when magnesium bonds with phosphorus? (A) Mig.P_2 (A) HG (C) N&CI (D) KCI 14. A corect name for N _i O ₂ is (A) Introgen (I) oxide (A) Nitrogen (I) oxide (D) nitrogen (IV) oxide 13. Which of the following is the correct formula for nitric exit? (A) HNO, (C) HF	Chemistry-Unit 4 DRAF 1. When a potassium atom reacts with bromine, the potassium atom will. (A)lose only 1 electron (C) gain only 1 electron (B)lose 2 electrons (D) gain 2 electrons	20. What is the formula of nitrogen (Π) oxide? (Δ) NO (C) N,O (B) NO (D) N,O,

Chemistry- Unit 5

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Chemistry- Unit 5

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1. The bonds between hydrogen and oxygen in a water molecule are classified as	8. Which type of molecule is CF ₄ ?	molecule?	(A) trigonal planar (C) big bent
(A) polar covalent (C) ionic	(A) polar, with a symmetrical distribution of charge	H-CI (C) (A)	(B) trigonal pyramidal (D) linear
(B) nonpolar covalent (D) metallic	(B) polar, with an asymmetrical distribution of charge	Н-О Н-М-Н	 (A) trigonal planar (C) big bent
2. Which molecule is nonpolar? (A)H ₂ O (C)CO	(C) nonpolar, with a symmetrical distribution of charge		(B) trigonal pyramidal (D) linear
(B)NH ₃ (D)CO ₂	(D) nonpolar, with an asymmetrical distribution of charge	(b) (D)	19. Which compound contains only covalent bonds? (A)NaOH (C) Ca(OH),
Which of these substances has the strongest intermolecular forces?	9. The shape of a molecule of BF, is said to be:	16. Which electron-dot structure is correct for SiO ₂ ?	(B) Ba(OH) ₂ (D) CH ₃ OH
(A)H ₂ O (C)H ₂ Sc (B)H S (D)H Te	(A) trigonal planar (C) big bent (B) trigonal pyramidal (D) linear	OTSP:O Sf O (A) (C)	 When phosphorus and chlorine atoms combine to form a molecule of PCI., 6 electrons will form
(b) Π_2 (b) Π_2 (c) (10. Which compound has molecules that form the	O!!!S!!!O	(A) nonpolar covalent bonds
 which electron-dot structure represents a non- polar molecule? 	strongest hydrogen bonds?	(B) H:O: H	(C) ionic bonds
н:о: н:й:н	(B) HBr (D) HCl	(D)	(D) nyarogen bonas
(A) H (C)	11. Which of the following compounds has the highest helling point?		n and a second secon
H	(A) H_2O (C) H_2Se		
н:ё:н н.о.	(B) H_2S (D) H_2Te		
H (D) (B)	 Which pair of characteristics describes the molecule illustrated below? 		
e or a state of the second second	H-S	fering and the second	a and a second secon
Which molecule contains a triple covalent bond between its atoms?	H and the second s		
$ \begin{array}{c} (A)N_2 \\ (B)Q_2 \\ \end{array} $	(A)symmetrical and polar (B)symmetrical and nonpolar		
$(D)O_2$ $(D)II_2$	(C) asymmetrical and polar (D) asymmetrical and nonpolar		
 A diamond is an example of (A) a supercooled liquid (C) a metallic substance 	13 Which molecule has an asymmetrical shape?		an balan sana karang sa sana na karang sana sana karang sana sana sana sana sana sana sana s
(B) an ionic compound (D) a network solid	$(A)N_2 (C)Cl_2$		
 In which liquid is hydrogen bonding strongest? (A) HF(0 (C) CH (0 	(B) NH ₃ (D) CCl ₄		
(B) $H_2(t)$ (D) $NH_3(t)$	14. The shape of a molecule of BF ₃ is said to be: (A) trigonal planar (C) big bent		
	(B) trigonal pyramidal (D) linear		
D	RAFT	DR	AFT
D	RAFT	DR	AFT 18. What is the total number of nitrogen atoms in
I. What is the total number of moles of atoms resent in 1 oram formula name of BVC NOV	RAFT Unit 7 Mole 9. The empirical formula of a compound is CH ₃ , The molecular formula of this compound cauld	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms ² (A10 50 mole of H(²) (C) 15 moles of Cy	AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO ₂ gas? (A)1.5 × 10 ²³
I. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C2H3O2)/(A)9 (C)3	P. The empirical formula of this compound is CH ₃ . The molecular formula of this compound could be	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms ² (A)0.65 mole of HCI (C) 1.5 moles of Cu (B)0.75 mole of H ₂ O (D)1.5 moles of H ₂	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A)1.5 × 10²¹ (B) 6.0 × 10²³ (C) 0.0 × 10²³
I. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C2H3O2); (A) 9 (D) 14	Unit 7 Mole 9. The empirical formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C ₂ H ₆ (B) C ₂ H ₄ (D) C ₃ H ₆	 Which sample contains a total of 9.0 × 10²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H₂O (D) 1.5 moles of H₂ What is the total number of atoms contained in a substitution of the substitution of the	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴
I. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C2H3O2); (A)9 (C)3 (B) 14 (D) 15 2. The gram formula mass of NH2Cl is (A)22.4 g/mole (C) 53.5 g/mole	Unit 7 Mole 9. The empirical formula of a compound is CH3. The molecular formula of this compound could be (A)CH4, (C) C2H4, (B) C2H4, (D)C3H6. 10. What is the empirical formula of a compound	 16. Which sample contains a total of 9.0 × 10²³ atoms? (A)0.60 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H₂O (D) 1.5 moles of H₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A)1.00 atom 	 What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ The volume occupied by 9.03 × 10²³ molecules
1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C_H,O_b); (A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH_Cl is (A)22.4 g/mole (B)28.0 g/mole (D)95.5 g/mole	Unit 7 Mole 9. The empirical formula of a compound is CH3. The molecular formula of this compound could be (A)C(H4 (C) C2H4, (B) C2H4 (D) C3H6. 10. What is the empirical formula of a compound that contains 30.4% nitrogen and 69.6% oxygen by mas?	 Which sample contains a total of 9.0 × 10²³ atoms? (A)0.60 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H₂O (D) 1.5 moles of H₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B) 2.00 atoms (C) 1.20 × 10⁴⁴ atoms 	AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO ₂ gas? (A) 1.5×10^{23} (B) 6.0×10^{23} (C) 3.0×10^{21} (D) 1.2×10^{24} 19. The volume occupied by 9.03×10^{23} molecules of N ₂ gas at STP is closest to (A) 0.500 liter (C) 22.4 liters
 What is the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₂O₂)/(A)9 (C)3 (B) 14 (D) 15 The gram formula mass of NF₄C1 is (A)22.4 g/mole (C) 53.5 g/mole (B)28.0 g/mole (C) 995.5 g/mole The gram-formula mass of (NH₄)₄CO₂ is (A)46.0 g (C) 28.0 g/mole 	Vinit 7 Mole 9. The empirical formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C ₂ H ₆ . (B) C ₂ H ₄ (D) C ₃ H ₆ . 10. What is the empirical formula of a compound that contains 30.4% nitrogen and 69.6% oxygen by mas? (A) NO (C) N ₂ O ₃ . (B) NO ₅ (D) N ₂ O ₅ .	 16. Which sample contains a total of 9.0 × 10²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H₂O (D) 1.5 moles of H₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10²⁴ atoms (D) 6.02 × 10¹²⁹ atoms 	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₆ gas at SP is closest to (A) 0.500 liter (C) 2.2.4 liters (B) 1.50 liters (D) 33.6 liters
 Differentiation of the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₂O₂)/(A)9 (C)3 (B) 14 (D) 15 The gram formula mass of NH₂C is (A)22.4 g/mole (C) 53.5 g/mole (B)28.0 g/mole (C) 195.5 g/mole The gram-formula mass of (NH₂CO₂ is (A)46.0 g (C) 78.0 g (B)64.0 g (D) 96.0 g 	Mole 9. The empirical formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C ₂ H ₆ (B) C ₂ H ₄ (D) C ₃ H ₆ 10. What is the empirical formula of a compound that contains 30.4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₃ O ₅ 11. A compound consists of 25.9% nitrogen and	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms ² (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H ₂ O (D) 1.5 moles of H ₂ 17. What is the total number of atoms contained in a 1.00-mole sample of belium? (A)1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ²⁴ atoms (D)6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A)1.5 × 10³³ (B) 6.0 × 10³³ (C) 3.0 × 10³³ (D) 1.2 × 10³⁴ 19. The volume occupied by 9.03 × 10³³ molecules of N₂ gas at SP is closest to (A) 0.500 liter (C) 22.4 liters (B) 1.50 liters (D) 33.6 liters 20. The total number of molecules in 34.0 grams of NH, is equal to
 What is the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₂O₂)/(A)9 (C)3 (B)14 (D)15 The gram formula mass of NH₄Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (D)95.5 g/mole The gram-formula mass of (NH₄)₂CO₃ is (A)46.0 g (C)78.0 g (B)64.0 g (D)96.0 g Which substance has the greatest molecular 	EXAMPS Unit 7 Mole 9. The empirical formula of a compound is CH_3 . The molecular formula of this compound could be (A) CH_4 (C) C_2H_6 (B) C_2H_4 (D) C_3H_6 10. What is the empirical formula of a compound that contains 30.4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ 11. A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound?	 I6. Which sample contains a total of 9.0 × 10²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H₂ O (D) 1.5 moles of H₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10²⁴ atoms (D) 6.02 × 10²³ atoms 	AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO ₂ gas? (A) 1.5 × 10 ²³ (B) 6.0 × 10 ²³ (C) 3.0 × 10 ²³ (C) 3.0 × 10 ²³ (C) 1.2 × 10 ²⁴ 19. The volume occupied by 9.03 × 10 ²³ molecules of N ₂ gas at STP is closest to (A) 0.500 liter (C) 22.4 liters (B) 1.50 liters (D) 33.6 liters 20. The total number of molecules in 34.0 grams of NH ₃ is equal to (A) 1.00 × 22.4 , (B) 2.00 × 22.4 ,
 I. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₃O₂)/(A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH₄Cl is (A)22.4 g/mole (C)53.5 g/mole 3. The gram-formula mass of (NH₄)₂CO₃ is (A)46.0 g (C)78.0 g (B) 64.0 g (D)96.0 g 4. Which substance has the greatest molecular mass? (A)H₂O₃ (C) CF₄ 	EXAMPS Unit 7 Mole 9. The empirical formula of a compound is CH_3 . The molecular formula of this compound could be (A) CH_4 (C) C_2H_6 (B) C_3H_4 (D) C_3H_6 10. What is the empirical formula of a compound that contains 30.4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ 11. A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O	 If a which sample contains a total of 9.0 × 10²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H₂O (D) 1.5 moles of H₂ What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10²³ atoms (D) 6.02 × 10²³ atoms 	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of Ng as at STP is closest to (A) 0.500 liter (C) 22.4 liters (B) 1.50 liters (D) 33.6 liters 20. The total number of molecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (C) 1.00 × 60.2 × 10²³ (C) 1.00 × 60.2 × 10²³
 I. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₃O₂)₂ (A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH₄Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole 3. The gram-formula mass of (NH₄)₂CO₃ is (A)46.0 g (C) 78.0 g (B)64.0 g (D)96.0 g 4. Which substance has the greatest molecular mass? (A)H₂O₂ (C)CF₄ (B)NO (D)1₂ 	Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4 (C) C, H4 (B) C, H4 (D) C, H4 (B) C, H4 (D) C, H4 (B) C, H4 (D) C, H4 (C)	DR 16. Which sample contains a total of 9.0 × 10 ²¹ atoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H ₂ O (D)1.5 moles of H ₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B)2.00 atoms (C) 1.20 × 10 ⁴² atoms (D)6.02 × 10 ⁷³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₃ gas at STP is closest to (A) 0.500 liter (D) 33.6 liters 20. The total number of molecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
 What is the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₃O₂); (A)9 (C)3 (B)14 (D)15 The gram formula mass of NH₄Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)95.5 g/mole The gram-formula mass of (NH₄)₂CO₃ is (A)46.0 g (C)78.0 g (B)64.0 g (D)96.0 g Which substance has the greatest molecular mass? (A)H₂O₂ (C) CF₄ (B)NO (D)I₄ The number of moles of molecules in a 12.0-gram sample of Cl₂ is 	Vinit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4 (C) C2H4 (B) C3H4 (D) C3H4 10. What is the empirical formula of a compound that contains 30.4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N2O, (B) NO2 (C) N2O, (B) NO2 (C) N2O, (C) N2O	 Here and the sample contains a total of 9.0 × 10²¹ atoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H2 (D) 1.5 moles of H2 What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10²³ atoms (D) 6.02 × 10⁷³ atoms 	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (C) 3.0 × 10²⁴ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₈ gas at STP is closest to (A) 0.500 liter (D) 33.6 liters 20. The total number of molecules in 34.0 grams of NH₈ is equal to (A) 1.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
 I. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C₂H₃O₂)₂ (A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH₄Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)55.5 g/mole 3. The gram-formula mass of (NH₄)₂CO₃ is (A)46.0 g (C) 78.0 g (B)64.0 g (D)96.0 g 4. Which substance has the greatest molecular mass? (A)H₂O₂ (C) CF₄ (B)NO (D)1₄ 5. The number of moles of molecules in a 12.0-gram sample of CL₂ is 12.0 moles 	Vinit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4 (C) C, H4 (B) C, H4 (D) C, H4 (B) C, H4 (D) C, H4 (B) C, H4 (D) C, H4 (C) C, H4 (C	 16. Which sample contains a total of 9.0 × 10²¹ atoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of HQ (D)1.5 moles of H₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10²³ atoms (D) 6.02 × 10²³ atoms 	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (C) 3.0 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₃ gas at STP is closest to (A) 0.500 liter (D) 33.6 liters 20. The total number of molecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.62 × 10²³
D 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂); (A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH ₂ Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)44.0 g (C)78.0 g (B)(64.0 g (C)78.0 g (B)(78.0	Vinit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4, (C) C,H4, (D)	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H20 (D)1.5 moles of H2 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B)2.00 atoms (C) 1.20 × 10 ⁴² atoms (D)6.02 × 10 ⁴² atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of Ng gas at STP is closest to (A) 0.500 liter (D) 3.6 k liters (D) 33.6 liters 20. The total number of nolecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (B) 2.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
Differentiately solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 g/mole (C) 53.5 g/mole (B) 28.0 g/mole (C) 995.5 g/mole (B) 28.0 g/mole (C) 995.5 g/mole (B) 28.0 g/mole (C) 995.5 g/mole (B) 44.0 g (C) 78.0 g (B) 64.0 g (C) 78.0 g (B) 78.0 g (C) C F4 (B) NO 12.0 moles (A) (C) $\frac{120}{12.0}$ mole 12.0 × 35.5 moles	Mole Unit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4, (C) C,H4, (B) C,H4, (D) C,H4, (B) C,H4, (D) C,H4, (C) NA1 is the empirical formula of a compound that contains 30.4% ntrogen and 69.6% oxygen by mass? 10. What is the empirical formula of a compound that contains 30.4% ntrogen and 69.6% oxygen by mass? (A) NO (C) N2,O3, (D) N2,O3 11. A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (D) NQ0, (D) NQ0, (D) NQ0, (D) NQ0, (D) NQ0, (D) NQ0, (D) N2,O3 12. What is the percent by mass of oxygen in propanal, CH3, CH2, CH07 (A) 100 (C) (C) 21.3% 13. In which compound is the percent by mass of oxygen greatest? (A) BeO (C) (CaO	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H ₂ O (D) 1.5 moles of H ₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ²³ atoms (D) 6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of Ng as at STP is closest to (A) 0.500 liter (D) 3.6 liters (D) 2.2 × 10²³ 20. The total number of notecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (B) 2.00 × 6.62 × 10²³ (D) 2.00 × 6.62 × 10²³
Differentiately solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 g/mole (B) 28.0 g/mole (D) 95.5 g/mole (B) 28.0 g/mole (D) 95.5 g/mole (B) 28.0 g/mole (D) 95.5 g/mole (B) 64.0 g (C) 78.0 g (B) 14.0 D I ₂ 3. The gram-formula mass of CNH ₂ CO ₃ is (A) 14,0 C ₃ (C) CF ₄ (B) NO (C) I ₂ 5. The number of moles of molecules in a 12.0- gram sample of Cl ₂ is $\frac{19.0}{5.5}$ mole 12.0 moles (A) (C) $\frac{12.0}{11.0}$ mole 12.0 x 35.5 moles (B) (D) (D)	PARET Unit 7 Mole 9. The empirical formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C ₂ H ₄ (B) C ₂ H ₄ (D) C ₃ H ₆ (A) NO (C) N ₂ O ₃ (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ 11. A compound consists of 2.5 9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 11. A compound consists of 2.5 9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 12. What is the percent by mass of oxygen in propanal, CH ₂ (H ₂ (HO? (C) 38.1% (B) 27.6% (D) 62.1% 13. In which compound is the percent by mass of oxygen greatest? (A) BeO (C) CaO (B) MgO (D) SrO	 Which sample contains a total of 9.0 × 10²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H20 (D) 1.5 moles of H2 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10²³ atoms (D) 6.02 × 10²³ atoms 	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₄ gas at STP is closest to (A) 0.500 liters (D) 33.6 liters (D) The total number of nolecules in 34.0 grams of NH₄ is equal to (A) 1.00 × 22.4 (E) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 2.4 (C) 1.00 × 6.02 × 10²³
Differentiately solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 64.0 g (C) 78.0 g (B) 64.0 g (C) 78.0 g (C) 61.0 mole (C) 12.0 moles (C) 12.0 moles (C) 12.0 moles (C) 12.0 moles (C) 12.0 moles (B) (D) (D) 12 (C) 12.0 moles (C) 12.0 moles (C) (D) 12 (C) 12.0 moles (D) (D) 12 (C) 12.0 moles (D) 12 (C) 12.0 moles (D) (D) 12 (C) 12.0 moles (D) 12 (D) 12 (Vinit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4, (C) C; H4, (B) C; H4, (D) C; H	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H ₂ O (D) 1.5 moles of H ₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ²³ atoms (D) 6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₄ gas at STP is closest to (A) 0.500 liters (D) 33.6 liters (D) The total number of nolecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (E) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
Definitely solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 (C) 78.0 g (B) 64.0 g (C) 78.0 g (C) 61.0 g (C) 78.0 g (C) 78	Vinit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4, (C) C;H4, (B) C;H4, (D)	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H ₂ (O) 1.5 moles of H ₂ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ⁷³ atoms (D) 6.02 × 10 ⁷³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₄ gas at STP is closest to (A) 0.500 liter (D) 33.6 liters (D) The total number of nolecules in 34.0 grams of NH₄ is equal to (A) 1.00 × 22.4 (E) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
Definitely solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 µmole (B) 28.0 µmole (C) 95.5 µmole (B) 28.0 µmole (C) 95.5 µmole (B) 28.0 µmole (C) 95.5 µmole (C) 15.0 µmole (C) 12.0 µmole (C) 0.1 (C) 0.1 (C) 0.2 (D) 0.2 µmole	Vinit 7 Mole 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4, (C) C;H4, (B) C;H4, (D)	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H ₂ (O) (D) 1.5 moles of H ₃ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ²³ atoms (D) 6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₂ gas at STP is closest to (A) 0.500 liter (D) 33.6 liters (D) The total number of nolcules in 34.0 grams of NH₃ is equal to (A) 1.00 × 22.4 (E) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
Definitely solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 g/mole (B) 28.0 g/mole (C) 95.5 g/mole (B) 28.0 g/mole (C) 95.5 g/mole (B) 28.0 g/mole (C) 95.5 g/mole (C) 76.0 g (C) 76	Vinit 7 Mole 9. The empirical formula of a compound is CH3. The molecular formula of this compound could be (A) CH4. (C) C4H4. (B) C4H4. (C) C4H4. (B) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (C) C4H4. (DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H ₂ (O) (D) 1.5 moles of H ₃ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ²³ atoms (D) 6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A)1.5 × 10²³ (B)6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ (D) 1.2 × 10²⁵ (D) 1.2 × 10²
Definitely solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 g/mole (B) 28.0 g/mole (C) 995.5 g/mole (B) 28.0 g/mole (C) 995.5 g/mole (B) 28.0 g/mole (C) 995.5 g/mole (B) 64.0 g (C) 78.0 g (B) 05.0 g 4. Which substance has the greatest molecular mass? (A) H ₂ O ₂ (C) CF ₄ (B) NO (C) I ₁ 5. The number of moles of molecules in a 12.0- gram sample of Cl ₂ is $\frac{19.0}{5.5}$ mole 12.0 moles (A) (C) $\frac{12.0}{1.5}$ mole 12.0 x 35.5 moles (B) (D) 6. The total number of moles represented by 20 grams of CaCO ₃ is (A) 1 (C) 0.1 (B) 2. (D) 0.2 7. What is the total mass of 2.0 moles of H ₂ (g)? (A) 1.0 g (C) 3.0 g	Vinit 7 Mole 9. The empirical formula of a compound is CH3. The molecular formula of this compound could be (A) CH4. (C) CH4. (B) C2H4. (D) C3H6. 10. What is the empirical formula of a compound that contains 30-4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N2O3. (B) NO2 (D) N2O3. 11. A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N2O3. 12. What is the percent by mass of oxygen in propanal. CH3.CH2.CHO? (A) NO (C) N2O3. 13. In which compound is the percent by mass of oxygen greatest? (A) BO3. (D) SFO 14. An example of an empirical formula is (A) CH4. (C) C4H40H2. (B) C7H4. (D) C4H204. 15. Which molecular formula is correctly paired with its corresponding empirical formula? (A) CC, H4. (D) C4H204. 15. Which molecular formula is correctly paired with its corresponding empirical formula? (A) CC, H4. (C) C4H404. 15. Which molecular formula is correctly paired with its corresponding empirical formula? (A) CC, H4. and CH4. (C) C4H4. and CH4.	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H ₂ O (D) 1.5 moles of H ₃ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ²³ atoms (D) 6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A)1.5 × 10²³ (B)6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ (B) 1.2 × 10²⁴ (D) 1.2 × 10²⁴ (C) 1.2 × 10²⁴ (D) 1.2 × 10²⁴ (D) 1.2 × 10²⁴ (D) 1.2 × 10²⁴ (D) 1.2 × 10²⁵ (D) 1.2 × 10²
Definition of the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 (A) 22.4 µmole (C) 53.5 µmole (B) 28.0 µmole (C) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (C) 78.0 g (B) 64.0 g (C) 78.0 g (C) 7	Mole Unit 7 Mole 9. The empirical formula of a compound is CH3. The molecular formula of this compound could be (A) CH4. (C) CH4. (B) C2H4. (D) C3H4. 10. What is the empirical formula of a compound that contains 30-4% nitrogen and 69.0% oxygen by mass? (A) NO (C) N2O3. (B) NO2 (D) N2O3. 11. A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N2O3. 12. What is the percent by mass of oxygen in propanal. CH3.CH2.CHO? (A) 10.0% (C) 38.1%. (B) 27.6% (D) 62.1% 13. In which compound is the percent by mass of oxygen greatest? (A) BO5 (C) CAO3. (B) MgO (D) 5FO 14. An example of an empirical formula is (A) CH4. (C) C,H4.(CH)2. (B) C;H4. (D) C,H2.(H2). (B) C;H4. (D) C,H2.(H2). (B) C;H4. (D) C,H2.(H2). (C) CA0. (C) CA0. (C) CA0. (C) CA0. (C) CA0. (C) CA0. (C) CA0. (C) CA1. (C) C,CH4.and CH4. (C) C,CH4.and CH4. (C) C;H4.and C;H4. (C) C;H4.and CH4. (C) C;H4.and C;H4. (C) C;	DR 16. Which sample contains a total of 9.0 × 10 ²³ stoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H ₂ 0 (D)1.5 moles of H ₃ 17. What is the total number of stoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B)2.00 atoms (C) 1.20 × 10 ²³ atoms (D)6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A)1.5 × 10³² (B)6.0 × 10³³ (C)3.0 × 10³³ (C)1.2 × 10³⁴ 19. The volume occupied by 9.03 × 10³³ molecules of N₃ gas at STP is closest to (A)0.500 liter (D)3.6 liters (B)1.50 liters (D)3.6 liters (D)3.6 diters (D)2.00 × 2.24 (B)2.00 × 22.4 (C)1.00 × 6.02 × 10²³ (C)1.00 × 6.02 × 10²³
1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂)? (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A)22.4 µmole (C) 53.5 µmole (B) 28.0 µmole (C) 995.5 µmole (B) 28.0 µmole (C) 995.5 µmole (C) 35.5 µmole (C) 35.5 µmole (C) 35.5 µmole (C) 36.0 µmole (C) 195.0 µmole (C) 195.0 µmole (C) 18.0 µmole (C) 196.0	PARFT Unit 7 Mole 9. The empirical formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C ₄ H ₄ (B) C ₂ H ₄ (D) C ₃ H ₆ 10. What is the empirical formula of a compound that contains 30-4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ 11. A compound consists of 2.5 9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 11. A compound consists of 2.5 9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 12. What is the percent by mass of oxygen in propanal, CH ₂ (H,CHO? (A) DO ⁵ (C) 28.1% (B) 27.6% (D) 62.1% 13. In which compound is the percent by mass of oxygen greatest? (A) BeO (C) CaO (B) MgO (D) 5rO 14. An example of an empirical formula is (A) CH ₄ (C) C ₄ H ₄ (OH) ₂ (B) C ₁ H ₄ (D) C ₄ H ₂ O ₆ 15. Which molecular formula is correctly paired with its corresponding empirical formula? (A) CC, C ₄ H ₄ and CH ₄ (C) C ₄ H ₄ and CH ₄	DR 16. Which sample contains a total of 9.0 × 10 ²³ stoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H ₂ O (D)1.5 moles of H ₃ 17. What is the total number of stoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B)2.00 atoms (C) 1.20 × 10 ²³ atoms (D)6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³² (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₃ gas at STP is closest to (A) 0.500 liter (D) 3.6 liters (D) 3.6 liters 20. The total number of molecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 2.2.4 (B) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³
Definition of the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 (A) 22.4 µmole (C) 53.5 µmole (B) 28.0 µmole (C) 95.5 µmole (B) 28.0 µmole (D) 95.5 µmole (B) 28.0 µmole (C) 78.0 g (B) 44.0 g (C) 78.0 g (B) 12.0 moles 35.7 (A) 14,0 C, (C) CF ₄ (B) NO (C) 12 (B) NO (C) CF ₄ (B) NO (C) 12 (C) The number of moles of molecules in a 12.0-gram sample of Cl ₂ is $\frac{180}{35.5}$ mole 12.0×35.5 moles (A) (C) $\frac{120}{11.0}$ mole 12.0×35.5 moles (B) (D) (C) $\frac{120}{11.0}$ mole 12.0×35.5 moles (B) (D) 20 g (C) 3.0 g (B) 2.0 g (C) 3.0	PARET Unit 7 1 The molecular formula of a compound is CFI ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C ₂ H ₄ (B) C ₂ H ₄ (D) C ₃ H ₆ 10 . What is the empirical formula of a compound that contains 30-4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ 11 . A compound consists of 25.9% nitrogen and 7A.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 11 . A compound consists of 25.9% nitrogen and 7A.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 12 . What is the percent by mass of oxygen greatest? (A) BO (C) CaO (B) M ₂ O (D) SrO 13 . In which compound is the percent by mass of oxygen greatest? (A) BO (C) C ₄ H ₄ (B) C ₁ H ₄ (D) C ₄ H ₄ OH ₂ (B) C ₁ H ₄ (D) C ₄ H ₄ OH ₂ (B) C ₁ H ₄ (D) C ₄ H ₄ OH ₂ (B) C ₁ H ₄ (D) C ₄ H ₄ OH ₂ (B) C ₄ H ₄ and C ₁ H ₂ (D) P ₄ O ₁₆ and P ₄ O ₅	DR 16. Which sample contains a total of 9.0 × 10 ²³ stoms? (A)0.50 mole of HC1 (C) 1.5 moles of Cu (B)0.75 mole of H20 (D)1.5 moles of H3 17. What is the total number of stoms contained in a 1.00-mole sample of helium? (A)1.00 atom (B)2.00 atoms (C) 1.20 × 10 ²³ atoms (D)6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A)1.5 × 10³² (B)6.0 × 10³³ (C)3.0 × 10³³ (C)3.0 × 10³³ (D)1.2 × 10³⁴ (D)1.2 × 10³⁵ (D)1.2 × 10³⁵
Differentiately solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ (A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH ₂ Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)44.0 g (C)78.0 g (B)(44.0 g (C)78.0 g (B)(44.0 g (C)78.0 g (B)NO (C)CF ₄ (B)NO (C)CF ₄ (B)NO (C) 12.0 moles (A) (C) 13.0 mole 12.0 × 35.5 moles (B) (D) 2. The number of moles of molecules in a 12.0- gram sample of Cl ₂ is 13.0 mole 12.0 × 35.5 moles (B) (D) 3. The total number of moles represented by 20 grams of CaCO ₃ is (A)1 (C) (C) (B)2 (D)0.2 7. What is the total mass of 2.0 moles of H ₂ (g)? (A)1.0 g (C)3.0 g (B)2.0 g (D)4.0 g 3. A sample of an unknown gas at STP has a density 01.25 grams per titer. What is the gram molecular mass of this gas? (A)28.0 g (C)40.0 g	Material Mote 9. The empirical formula of a compound is CH3, The molecular formula of this compound could be (A) CH4, (C) C,H4, (B) C,H4, (D)	DR 16. Which sample contains a total of 9.0 × 10 ⁹³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H20 (D) 1.5 moles of H3 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ⁹³ atoms (D) 6.02 × 10 ⁹³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₄ gas at STP is closest to (A) 0.500 liters (D) 33.6 liters (D) The total number of notcules in 34.0 grams of Nf1, is equal to (A) 1.00 × 22.4 (B) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
Differentiately of the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₃ O ₂)/(A) ⁹ (C) ³ (B) ¹⁴ (D) ¹⁵ 2. The gram formula mass of NH ₂ Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)55.5 g/mole (B)28.0 g/mole (C)55.5 g/mole (B)28.0 g/mole (C)55.5 g/mole (C)64.0 g (C)78.0 g (B)(44.0 g (C)78.0 g (C)78.0 g (B)(44.0 g (C)78.0 g (C)7	EXAMPS Unit 7 Mole 9. The empirical formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C,H ₄ (B) C ₂ H ₄ (D) C ₃ H ₆ 10. What is the empirical formula of a compound that contains 30.4% introgen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ 11. A compound consits of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 13. A compound consits of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 14. A compound substationary (D) N ₂ O ₃ 15. Notice the compound? (A) NO (C) N ₂ O ₃ 16. Notice the compound? (A) NO (C) N ₂ O ₃ 17. A nexample of an empirical formula is (A) CH ₄ (C) C,H ₄ O(H) ₂ (B) C,H ₄ (D) C,H ₄ O(H) ₂ (B) C,H ₄ (D) C,H ₄ O(H) ₂ (B) C,H ₄ (D) C,H ₄ O(H) ₂ (C) C,H ₄ (D) C,H ₄ O(H) ₂ (C) C,H ₄ (D) C,H ₄ O(H) ₂ (D) P,O ₁₀ and P,O ₅	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A) 0.50 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H20 (D) 1.5 moles of H3 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ⁷³ atoms (D) 6.02 × 10 ⁷³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₂ gas at STP is closest to (A) 0.500 liter (D) 23.6 liters 20. The total number of notcuese in 34.0 grams of NH₃ is equal to (A) 1.00 × 2.24 (B) 2.00 × 2.24 (C) 1.00 × 6.02 × 10²³ 20. The total number of notcuese in 34.0 grams of NH₃ is equal to (A) 1.00 × 6.02 × 10²³
Definition of the total number of moles of atoms present in 1 gram formula mass of $Pb(C_2H_1Q_2)_2'$ (A)9 (C)3 (B)14 (D)15 2. The gram formula mass of NH ₂ Cl is (A)22.4 g/mole (C)53.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (B)28.0 g/mole (C)95.5 g/mole (C)95.5 g/mole (C)95.0 g (C)78.0 g (C)46.0 g (C)78.0 g (C)6.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)78.0 g (C)	PARET Unit 7 1 The molecular formula of a compound is CH ₃ The molecular formula of a compound is CH ₃ The molecular formula of a compound is CH ₃ (B) C ₂ H ₄ (C) C ₂ H ₄ (D) C ₃ H ₆ (C) C ₄ H ₄ (E) C ₂ H ₄ (D) C ₃ H ₆ (D) C ₄ H ₆ (E) C ₄ H ₆ (D) C ₄ H ₆ (C) C ₄ H ₆ (D) P ₆ O ₁₆ and CH ₁₆ (C) C ₄ H ₆ (D) P ₆ O ₁₆ and P ₅ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₅ (D) P ₆ O ₁₆ and P ₆ O ₁₆ (D) P ₆ O ₁₆ and P ₆ O ₁₆ (D) P ₆ O ₁₆ a	DR 16. Which sample contains a total of 9.0 × 10 ⁹³ soms? (A) 0.05 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H20 (D) 1.5 moles of H3 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atom (B) 2.00 atoms (C) 1.20 × 10 ⁷³ atoms (D) 6.02 × 10 ⁷³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10²³ (B) 6.0 × 10²³ (C) 3.0 × 10²³ (D) 1.2 × 10²⁴ 19. The volume occupied by 9.03 × 10²³ molecules of N₂ gas at STP is closest to (A) 0.500 liter (D) 33.6 liters (D) The total number of notcules in 34.0 grams of Nf1, is equal to (A) 1.00 × 22.4 (B) 2.00 × 22.4 (C) 1.00 × 6.02 × 10²³ (D) 2.00 × 6.02 × 10²³
Differentiately solution 1. What is the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 2. The gram formula mass of NH ₂ Cl is (A) 22.4 µmole (C) 53.5 g/mole (B) 28.0 g/mole (D) 95.5 g/mole (B) 28.0 g/mole (D) 95.5 g/mole (B) 28.0 g/mole (D) 95.5 g/mole (B) 64.0 g (C) 78.0 g (B) 100 (D) 1 ₂ 3. The number of moles of molecular mass? (A) 11 ₂ O ₂ (C) CF ₄ (B) NO (C) 12 ₃ (B) 12.0 moles (A) (C) 12 (B) 12.0 moles (A) (C) 12 (B) (D) 12 5. The number of moles represented by 20 grams of CaCO ₃ is (A) 1 (C) 0.1 (B) (D) 6. The total number of moles represented by 20 grams of CaCO ₃ is (A) 1 (C) 0.1 (B) 2.0 g (D) 0.2 7. What is the total mass of 2.0 moles of H ₂ (g)? (A) 1.0 g (C) 3.0 g (B) 2.0 g (D) 4.0 g 3. A sample of an unknown gas at STP has a density of 1.25 grams per liter. What is the gram molecular mass of this gas? (A) 28.0 g (C) 80.0 g (B) 44.0 g (D) 80.0 g	PARET Unit 7 1 The molecular formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C,H ₄ (B) C,H ₄ (C) C,H ₄ (B) C,H ₄ (C) C,H ₄ (B) C,H ₄ (C) C,H ₄ (C) NA is the empirical formula of a compound that contains 30-4% nitrogen and 69.6% oxygen by mass? (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ 1 . A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 1 . A compound consists of 25.9% nitrogen and 74.1% oxygen by mass. What is the empirical formula of the compound? (A) NO (C) N ₂ O ₃ 1 . An example of an empirical formula is (A) CH ₄ (C) C,H ₄ (CHO? (A) EO (C) CaO (B) MgO (D) 5rO 1 . An example of an empirical formula is (A) CH ₄ (C) C,H ₄ (CH) ₂ (B) C,H ₄ (D) C,H ₄ OC 1 . An example of an empirical formula is (A) CH ₄ (C) C,H ₄ (CH) ₂ (B) C,H ₄ and C,H ₅ (C) C,A ⁴ , and C,H ₅ (D) P,O ₁₀ and P,O ₅	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A)0.50 mole of HG1 (C) 1.5 moles of Cu (B)0.75 mole of H ₂ O (D)1.5 moles of H ₃ 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A)1.00 atoms (C) 1.20 × 10 ²³ atoms (D)6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³ (B) 6.0 × 10³⁰ (C) 3.0 × 10³¹ (D) 1.2 × 10³⁴ 19. The volume occupied by 9.03 × 10³³ molecules of NA₃ gas at STP is closest to (A) 0.500 liter (D) 3.6 liters (D) 3.5 6 liters 20. The total number of molecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 2.2 4 (B) 2.00 × 2.2 4 (C) 1.20 × 6.02 × 10²³
Definition of the total number of moles of atoms present in 1 gram formula mass of Pb(C ₂ H ₂ O ₂) ₂ ' (A) 9 (C) 3 (B) 14 (D) 15 (A) 22.4 µmole (C) 53.5 g/mole (B) 28.0 g/mole (C) 95.5 g/mole (B) 28.0 g/mole (C) 95.6 g (B) 64.0 g (C) 78.0 g (B) 70.0 g (C) CF ₄ (B) NO (C) 12.0 moles (C) 12.0 m	EVALUATE: The molecular formula of a compound is CH ₃ . The molecular formula of a compound is CH ₃ . The molecular formula of this compound could be (A) CH ₄ (C) C, H ₄ (B) C, H ₄ (D) C, H ₆ (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ (A) NO (C) N ₂ O ₃ (B) NO ₂ (D) N ₂ O ₃ (C) NO (C) N ₂ O ₃ (C) N ₂ O ₃ (D) N ₂ O ₃ (D) C) O ₂ O ₁ O ₃ (D) C) O ₃ O (D) SrO (A) An example of an empirical formula is (A) CH ₄ (C) C, H ₄ (CH) ₂ (D) C, H ₄ and CH ₄ (C) C, H ₄ and C, H ₂ (D) P, O ₁₀ and P, O ₅	DR 16. Which sample contains a total of 9.0 × 10 ²³ atoms? (A) 0.0 mole of HC1 (C) 1.5 moles of Cu (B) 0.75 mole of H20 (D) 1.5 moles of H3 17. What is the total number of atoms contained in a 1.00-mole sample of helium? (A) 1.00 atoms (C) 1.20 × 10 ²³ atoms (D) 6.02 × 10 ²³ atoms	 AFT 18. What is the total number of nitrogen atoms in 0.25 mole of NO₂ gas? (A) 1.5 × 10³ (B) 6.0 × 10³⁰ (C) 3.0 × 10³¹ (D) 1.2 × 10³⁴ 19. The volume occupied by 9.03 × 10³³ molecules of NA₃ gas at STP is closest to (A) 0.500 liter (D) 3.6 liters (D) 3.5 6 liters 20. The total number of molecules in 34.0 grams of NH₃ is equal to (A) 1.00 × 2.2 4 (B) 2.00 × 2.2 4 (C) 1.200 × 6.02 × 10²³

1. Which formula correctly represents antimony	Office Cnemical Reactions y 8. Given the unbalanced equation:	12. Which equation is correctly balanced? (A)CaO + $2H_2O \rightarrow Ca(OH)_2$	16. Given the balanced equation: $K_2CO_3 + BaCl_2 \rightarrow 2X + BaCO_3$
(V) oxide? (A) SbO ₅ (C) Sb ₂ O ₂	$_Al + _CuSO_4 \rightarrow _Al_2(SO_4)_3 +$	(B) NH ₃ + 2O ₂ \rightarrow HNO ₃ + H ₂ O (C) Ca(OH) _b + 2H ₂ PO ₂ \rightarrow Ca(PO ₂) _b + 3H ₂ O	What is the correct formula for the product represented by the letter X ?
(B) Sb ₅ O (D) Sb ₅ O ₂	Cu	(1) - (1) - (2) = (1) + (1)	(A)K (C)KCO ₃ (B)Cl (D)KCl
2. Given the reaction:	When the equation is balanced using the smallest whole-number coefficients, what is the	(D) Cu + 12004 - Color + 120 Color	17. Given the incomplete equation:
$Mg(s) + 2 AgNO_3(aq) \rightarrow Mg(NO_3)_2(aq) +$	+2 coefficient of Al?		$CaCl_2 \rightarrow Which are found with normalistic and holomore$
Ag(s)	(A)1 (C)3 (B)2 (D)4	$\underline{-\text{Al}_2(\text{SO}_4)_3} + \underline{-\text{Ce}(\text{OH}_{j_2} \rightarrow \text{Al}(\text{OH}_{j_3} \rightarrow \text{A}(\text{OH}_{j_3} \rightarrow$	the incomplete equation?
Which type of reaction is represented? (A) single replacement (C) synthesis	9. Given the unbalanced equation:	_CasO4	$(A)Ca + Cl (C)CaCl + O_2 (B)Ca + Cl_2 (D)CaCl + H_2O$
(B) double replacement (D) decomposition	$\underline{Al}(s) + \underline{O}_2(g) \rightarrow \underline{Al}_2O_1(s)$	When the equation is completely balanced using the smallest whole number coefficients the sum	18. Given the balanced equation:
 Which equation represents a double replacements 	when this equation is correctly balanced using	(A) 5 (C) 3	$X + C_{1} \rightarrow C_{2}H_{1}C_{1} + H_{1}C_{1}$
(A) 2 Na + 2 $H_2O \rightarrow 2$ NaOH + H_2	smallest whole numbers, what is the coefficient of $O_{\alpha}(g)$?	(B) 9 (D) 4	Which molecule is represented by 22
(B) $CaCO_3 \rightarrow CaO + CO_2$ (C) $LiOH + HCI \rightarrow LiCI + H_2O$	(A)6 (C)3	14. Given the unbalanced equation:	(A) C_2H_4 (C) C_3H_6
$(D)CH_4 + 2 O_2 \rightarrow CO_2 + 2 H_2O$	(B)2 (D)4	$Al(OH)_3 + H_2SO_4 \rightarrow Al_2(SO_4)_3 + H_2O$	(B) C_2H_6 (D) C_3H_8
4. 2 $NH_3(g) \leftrightarrow N_2(g) + 3 H_2(g)$	10. Given the unbalanced equation:	What is the coefficient in front of the H ₂ O when	19. Given the incomplete equation:
What type of reaction is shown above?	$\begin{array}{c} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	the equation is completely balanced using the smallest whole number coefficients?	$2 N_2O_3(g) \rightarrow$
(A) synthesis (C) single replaceme (B) decomposition (D) double replaceme	ent What is the coefficient of $AI_2(SO_4)_3$ when the	(A)6 (C)3 (B)2 (D)4	Which set of products completes and balances the incomplete equation?
5 + 2 $SO_{2}(g) + O_{2}(g) \leftrightarrow 2 SO_{2}(g) \rightarrow 2$	equation is completely balanced using the smallest whole-number coefficients?	(D) -	$= (A) 2 N_2(g) + 3 H_2(g) = (C) 4 N O_2(g) + O_2(g) + \dots + \dots + N O_2(g) + O_2(g) + \dots + O_2(g) +$
What type of reaction is shown above?	(A)1 (C)3	$2Mg + O_2 \rightarrow 2X$	(B) 2 $N_2(g)$ + 2 $O_2(g)$ (D) 4 $NO(g)$ + $SO_2(g)$
(A) synthesis (C) single replaceme	ant (B)2 (D)4	What is the correct formula for the product represented by the letter X?	
(B) decomposition (D) double replacement	11. When the equation	(A)MgO (C)MgO ₂ (B)Mg ₂ O (D)Mg ₂ OH	
When hydrocarbons burn completely in an excess of oxygen, the products are	$\underline{} C_2 H_4 + \underline{} O_2 \rightarrow \underline{} CO_2 + \underline{} H_2 O$	(c) ² 2. (c).u.85.c.1	
(A) carbon monoxide and water (B) carbon dioxide and water	is balanced using smallest whole numbers, what is the coefficient of the O.7		liefer menseel viell, surfaced a devide fit
(C) carbon monoxide and carbon dioxide	(A)1 (C)3		
(D) carbon dioxide and carbon	(B)2 (D)4	gentine - Constant - Constant	
If an equation is balanced properly, both sides the equation must have the same number of	s of		
(A) atoms (C) molecules			
emistry- Unit 8 DR	:AFT 33	Chemistry- Unit 8 DRA	FT 34
emistry- Unit 8 DR	AFT 33	Chemistry- Unit 8 DRA	FT 34
emistry- Unit 8 DR	VAFT 33	Chemistry- Unit 8 DRA	FT 34
ernistry- Unit 8 DR	AFT 33	Chemistry- Unit 8 DRAI	FT 34 15. Given the balanced equation: K ₂ CO ₄ + BaC ₁ → 2X + BaCO, What is the correct formal point the order represented
emistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_gH_2O_g(g) + 6 O_2(g)$	CAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_{f}(g) \rightarrow 2 NH_{f}(g)$	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_{2}H_{2}+7O_{2} \rightarrow 4CO_{2}+6H_{2}O_{2}$ What is the total number of CO_ molecules produced	FT 34 15. Given the balanced equation: $K_{CO_{2}} + 8aC_{1}$, $\pm 2X + 8aC_{2}$, What is the correct formula for the product represented by the letter X? A K CO_{2}
emistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(t) \rightarrow C_g H_2O_4(g) + 6 O_2(g)$ What is the minimum number of Nets of CO_2(g). where the difference in Condeces 30 Automatics	CAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_{y}(g) + 3 H_{y}(g) \rightarrow 2 NH_{y}(g)$ How many filter of ammonia, measured at STP, are required under 26 Direct on the formed an economicality	Chemistry- Unit 8 DRAI 11. Given the reaction: $2C_2 t_6 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2 t_6 is consumed? (4) 6 07 2 to ²³	FT 34 15. Given the balanced equation: $K_{CO_4} + 8aC_{1} \rightarrow 2X + 8aCO_{3}$ What is the correct formula for the product represented by the letter X? A) KCO_4 B) KCO
emistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_0 H_2O_0(g) + 6 O_2(g)$ What is the minimum number of Ners of CO ₂ (g). measured as 1579, needed to produce 32.0 grans of oxygen? 0. direct	2AFT 33 Unit 9 Steichiometry 6. Given the reaction $N_{f(g)} + 3 H_{f(g)} \rightarrow 2 NH_{f(g)}$ How many filters of ammonia, measured at STP, are produced when 28.0 grams of nitrogen is completely consumed? $N_{f(g)} = 0.1472$	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_2T_6 = 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ notecules produced when one mole of C_F_4 is consumed? (A) 6 6 02 + 10 ²⁰ (B) 25 00 + 10 ²⁰ (C) 31 00 + 10 ²⁰	FT 34 15. Given the balanced equation: $K_{CO_4} + 8aC_5 \rightarrow 2X + BaCO_5$ What is the correct formula for the product represented by the letter X? A) KCO B) KCI C) K D) C1
emistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_0 H_{12}O_0(g) + 6 O_2(g)$ What is the minimum number of Ners of CO ₂ (g). measured as STP, needed to produce 32.0 grams of oxygen? A) 264 L C) 192 L B) 32.0 L D) 22.4 L	CAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_{y(g)} + 3 H_{y(g)} \rightarrow 2 NH_{y(g)}$ How many filers of ammonia, measured at STP, are produced when 28.0 grams of inflorger is computely consume? A) 44.8 C) 11.2 B) 5.00 D) 224	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_2F_6 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2F_6 is consumed? A) 6 6 2× 10 ²⁹ B) 2(5.02 × 10 ²⁹) C) 3(60.2 × 10 ²⁹)	FT 34 15. Given the balanced equation: K_{CO_2} + BaC, $\rightarrow 2X$ + BaCO, What is the correct formula for the product represented by the latter X? A) KCO, B) KCI C) K D) C1 17. Given the equation:
emistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_6 H_{12}O_6(g) + 6 O_2(g)$ What is the minimum number of Nilers of CO ₂ (g), measured at STP, needed to produce 32.0 grams of avgen? A) 264 L C) 192 L B) 32.0 D) 22.4 L C) 192 L C) 20.2 D) 22.4 L C) 20.2 L	CAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_{y(g)} + 3 H_{y(g)} \rightarrow 2 NH_{y(g)}$ How many filers of ammonia, measured at STP, are produced when 28.0 grams of inflorger is computely consume? A) 44.8 C) 11.2 B) 5.00 D) 22.4 7. Given the reaction:	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_2F_6 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2F_6 is consumed? A) 6 Go 2 + 10 ²⁹ B) 2(5 O 2 + 10 ²⁹) C) 3(5 O 2 + 10 ²⁹) C) 3(5 O 2 + 10 ²⁹) D) 4(4 O 2 + 10 ²⁹) 12. Given the reaction:	FT 34 15. Given the balanced equation: $K_{CO_2} + 8aC_1 \rightarrow 2X + 8aC_2$, What is the correct formula for the product represented by the letter X? A) KCO_ B) KCI C) K D) C1 17. Given the equation: $Zn + 2 HCI \rightarrow 2nCl_2 + H_2$
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_gH_2O_2(g) + 6 O_2(g)$. measured at STP, needed to produce 320 grans of oxygen? A) 2641 C) 1921 B) 3201 D) 2241 C) 1921 C) 2201 D) 2241 C) 1921 C) 1921	CAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_{1}(g) + 3 H_{2}(g) \rightarrow 2 NH_{3}(g)$ How many liters of ammonia, measured at STP, are produced when 28 organis of inflorger is completely consume? A) 44.8 C) 11.2 B) 5.60 D) 22.4 () Given the reaction: 2 CyH ₄₄ (g) + 25 O ₂ (g) \rightarrow 16 CO ₂ (g) + 18 H ₂ O(g)	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_2t_6 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2t_6 is consumed? A) 662 × 10 ²⁹ B) 2(5.02 × 10 ²⁹) C) 3(602	FT 34 15. Given the balanced equation: $K_{CO_4} + 8aC_1 \rightarrow 2X + 8aC_0$, What is the correct formula for the product represented by the letter X? A) KCO, B) KCI C; K D) C1 17. Given the equation: $Zn + 2 HCI - 2nCL_2 + H_2$ How many moles of HCW would be required to produce a
emistry- Unit 8 DR 1. Given the equation: $f CO_{2}(g) + 6H_{2}O(f) \rightarrow C_{g}H_{12}O_{g}(g) + 6 O_{2}(g)$ What is the minimumber of kilers of CO ₂ (g). What is the minimum number of kilers of CO ₂ (g). measured at STP, needed to produce 32.0 grams of avygen? A) 264 C, 192.L B) 32.0 L D) 22.4 L 2. Given the unbalanced equation: $_Mg(ClO_{2}(g) + o_{2}(g)) + MgCL_{2}(g) + O_{2}(g)$ What is the coefficient of O, when the equation is	Curit 9 Staichiometry 6. Given the reaction $N_2(g) + 3 H_2(g) - 2 NH_3(g)$ How many filers of ammonia, measured at STP, are produced when 28.0 grams of inflorgers is completely consumer? A) 44.8 A) 44.8 C) 11.2 B) 5.00 D) 22.4 C) Given the reaction: $2 (H_{H_0}(g) + 25 O_2(g) \rightarrow 16 CO_2(g) + 18 H_2O(g))$ Wrat volume of $C_2(H_0(g))$ will completely react to produce	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_2H_2 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ notecules produced when one mole of C_2H_2 is consumed? A) 602 × 10 ²⁰ B) 2502 × 10 ²⁰ C) 316.02	FT 34 16. Given the balanced equation: $K_{CO} + 8aC_{1} \rightarrow 2X + 8aC_{2}$ What is the correct formula for the product represented by the later X2 A) KC1 C) K D) C1 17. Given the equation: $Zn + 2 HC1 \rightarrow ZnC_{1} + H_{2}$ How many moles of HC1 would be required to produce a total of 2 moles of HC2 wou
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_g H_2O_2(g) + 6 O_2(g).$ What is the minimum number of liters of CO_2(g). massured at STP, needed to produce 320 grans of oxygen? A) 264(C) 192(B) 32.0(D) 22.4(C) 192(C) 20.2(g) + 0.4(g)(C) + 0.2(g). C) 22.4(C) 192(C) + 0.2(g)(C) + 0.2	2XAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_{1}(g) + 3 H_{1}(g) \rightarrow 2 NH_{3}(g)$ How many liters of ammonia, measured at STP, are produced when 280 grams of inflorger is completely consume? A) 44.8 C) 11.2 B) 5.00 D) 22.4 7. Given the reaction: $2 C_{1}H_{4}(g) + 25 O_{2}(g) \rightarrow 15 CO_{3}(g) + 18 H_{2}O(g)$ What volume of $C_{1}H_{4}(g)$ will completely react to produce exactly 36 lites of $H_{2}(g)$? A) 27 L C) 36 L	Chemistry- Unit 8 DRA 11. Given the reaction: $2C_2t_6 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2t_6 is consumed? A) 662 × 10 ²⁹ B) 2(5.02 × 10 ²⁹) C) 3(602 × 10 ²⁹) C) 3(6	FT 34 15. Given the balanced equation: $K_{CO_4} + 8aC_1 \rightarrow 2X + 8aC_0$, What is the correct formula for the product represented by the letter X? A) KCO B) KCI C) K D) C1 17. Given the equation: $Zn + 2 HCI \rightarrow 2nCL_2 + H_2$ How many moles of HCI would be required to produce a total of Z moles of H.? A) 0.6 C (3 B) 2 C) 4
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_gH_2O_2(g) + 6 O_2(g)$. What is the minimum number of liters of $CO_2(g)$. massured at STP, needed to produce 320 grans of axgen(P) A) 264(C) 192(B) 32.0(D) 22.4(C) 192(C) 20.2(g) + $D_2(g)$ C) Given the unbalanced equation: $-Mg(ClO_3)_2(g) \rightarrow -MgCl_2(g) + -O_2(g)$. What is the coefficient of O ₂ when the equation is balanced correctly using the smallest whole number coefficients(P) A) 1 (C) 3 B) 2 (D) 14	MAFT 33 Unit 9 Stoichiometry 6. Given the reaction $N_r(g) + 3 H_r(g) - 2 NH_r(g)$ How many liters of ammonia, measured at STP, are produced when 280 grame of inflorger is completely consume? A) 44.8 A) 44.8 C) 11.2 B) 5.00 D) 22.4 7. Given the reaction: $2 G_H_{ur}(g) + 25 O_r(g) \to 16 CO_r(g) + 18 H_rO(g)$ What volume of $C_r H_u(g)$ will completely react to produce exactly 36 liters of $H_rO(g)$? More and $H_rO(g)$ Mate volume of $V_rO(g)$? A) 27 L C) 36 L B) 2.0 L D) 4.0 L	Chemistry- Unit 8 DRAM 11. Given the reaction: $2C_2t_9 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2t_1 is consumed? A) 602 × 10 ²⁹ B) 2602 × 10 ²⁹ C) 3602 × 10	FT 34 16. Given the balanced equation: $K_{CO_4} + 8aC_1 \rightarrow 2X + 8aCO_1$ What is the correct formula for the product represented by the letter X? A) KCO_ B) KCO C) K D) C1 17. Given the equation: $Zn + 2 HCI \rightarrow 2nCU_2 + H_2$ How many moles of HCI would be required to produce a total of Z moles of H
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_g H_2O_2(g) + 6 O_2(g)$ What is the minimum number of liters of $CO_2(g)$. massured at STP, needed to produce 32.0 grans of aygen(P) A) 28.4 C) 192.4 B) 32.0 L) 22.4 C) Strent the unbalanced equation: $-Mg(ClO_2)_2(g) \rightarrow -MgCL_2(g) + -O_2(g)$. What is the coefficient of O_2 when the equation is balanced correctly using the smallest whole number $ayden(P) = D_2$ D) 4 C) Given the reaction:	Wrif 9 Stoichiometry 0. Given the reaction $N_1(g) + 3 H_1(g) + 2 NH_3(g)$ Now many liters of ammonia, measured at STP, are produced when 280 grame of nitrogen is completely consume? A) 44.8 C) 11.2 B, 50.0 D) 22.4 D) 22.4 O. Given the reaction $2 (H_{44}(g) + 25 O_2(g) \to 16 CO_2(g) + 18 H_2O(g))$ What volume of $C_1 H_4(g)$ will completely react to produce exactly 36 liters of $H_2O(g)$? A) 2.1 C C) 36 5L B) 2.0 L D) 4.0 L 8. Given the equation:	Chemistry- Unit 8 DRAM 11. Given the reaction: $2C_2t_3 + 7 O_2 \rightarrow 4 CO_3 + 6 H_2O$ What is the total number of CO ₂ molecules produced when one mole of C_2t_3 is consumed? $A = 26 O Z + 10^{29}$ $B = 26 O Z + 10^$	FT 34 16. Given the balanced equation: $K_{CO_4} + BaC_1 \rightarrow 2X + BaCO_1$ What is the correct formula for the product represented by the letter X? A) KCO_ B) KCO C) K D) C1 17. Given the equation: $Zn + 2 HCI \rightarrow 2nCU_5 + H_2$ How many moles of HCI would be required to produce a total of Z moles of H.? A) 0.6 () 3 D) 2 () 3 D) 2 () 3 D) 2 () 4 18. Given the balanced equation: $Fe(s) + CuSO_4(aq) \rightarrow FeSO_4(aq) + Cu(a)$
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_0 H_1O_2(g) + 6 O_2(g)$ measured at STP, needed to produce 32.0 grans of oxygen? A) 2641 C) 192 L B) 32.0 D) 22.4 L C) Unit be unbalanced equation: $-Mg(ClO_2)_2(g) \rightarrow -MgCL_2(g) + -O_2(g)$ What is the coefficient of O, when the equation is balanced correctly using the smallest whole number coefficients? A) 1 C) 3 B) 2 D) 4 C) Given the reaction: $6 CO_2 + 6 H_2 - O_2 + 6 D.$	Market State 33 Market State Statechlometry a Gwein the reaction $N_2(g) + 3 H_2(g) - 2 N H_3(g)$ A deal $N_2(g) + 3 H_2(g) - 2 N H_3(g)$ How many lifers of ammonia, measured at STP, are produced when 2.0 grams of inflorage is completely consume? A) 44.8 C) 111.2 B) 50.0 D) 224.4 C) Gwein the reaction D) 224.4 Gibles of H_2(G)(P) = 16 CO_2(g) + 18 H_2(G) Market State St	Chemistry- Unit 8 DRAM 11. Given the reaction: $2C_{2}F_{4} > 7 O_{2} \rightarrow 4 CO_{2} + 6 H_{2}O$ What is the total number of CO ₂ molecules produced when one mole of $C_{2}F_{4}$ is consumed? A) 662 × 10 ²³ B) 2(5.02 × 10 ²⁵) C) 3(602 × 10	FT 34 16. Given the balanced equation: $K_{CO_{2}} + 8aC_{1} \rightarrow 2X + 8aC_{2}$, What is the correct formula for the product represented by the letter X? A) KCO_{2} B) KCI C) K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow 2nCL_{2} + H_{2}$ How many moles of HCI would be required to produce a total of Z moles of H.? A) 0.5 () 3 B) 2 () 3 B) 2 () 3 B) 2 () 4 18. Given the balanced equation: $Fe(s) + CuSO_{2}(ac) \rightarrow FeSO_{2}(ac) + Cu(s)$ What total mass of ino in necessary to produce 1.00 mole of coper?
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_0 H_1O_2(g) + 6 O_2(g)$ What is the minimum number of liters of $CO_2(g)$. measured at STP, needed to produce 32.0 grans of 0 xygen? A) 264 C) 192 L B) 32.0 D) 22.4 L C) 193 L C) 193 L C) 193 L C) 193 L C) 194 L $-Mg(ClO_2/g6) \rightarrow -MgC_2(g) + -O_2(g)$ What is the coefficient of O_2 when the equation is balanced correctly using the smallest whole number coefficients? A) 1 C) 3 B) 2 D) 4 C) Given the reaction: $6 CO_2 + 6 H_2O - C_2 H_{12}O_2 + 6 O_2$ What is the local number of moles of water meeded to	MART 33 More 19 Statchlometry a. Given the reaction $N_1(g) \rightarrow 2 N N_2(g)$ A. Given the reaction $N_2(g) \rightarrow 3 H_2(g) \rightarrow 2 N N_2(g)$ How many lifers of ammonia, measured at STP, are produced when 2.0 grams of inflorgen is completely consume? A) 4.8 C) 11.2 B) 5.0 D) 22.4 A. Given the reaction D) 22.4 J. Given the reaction D) 22.6 J. Given the reaction: $2 (H_{40}(g) + 25 O_2(g) \rightarrow 15 CO_2(g) + 18 H_2O(g))$ Mint volume of $C_1 H_2(g)$ will completely react to produce exactly 36 lites of $H_2O(g)$? A) 2.0 D) 4.0 L Given the equation: $2 (H_{40} + 13 O_2 \rightarrow 8 CO_2 + 10 H_2O)$ How many moles of carbon dioxide are produced for each of obtaine of the obtaine consumer?	Chemistry- Unit 8 DRAI 11. Given the reaction: $2C_2t_3 + 7 O_2 \rightarrow 4 CO_3 + 6 H_2O$ What is the total number of CO_3 molecules produced when one mole of C_2t_3 is consumed? A) 662 × 10 ²³ B) 2(5.02 × 10 ²⁵) C) 3(602	FT 34 16. Given the balanced equation: $K_{CO}(*8aCL \rightarrow 2X*8aCO_{1}$ What is the correct formula for the product represented by the latter X? A) KCO B) KCI C) K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCU_{2} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HC
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_gH_1O_2(g) + 6 O_2(g)$ measured at STP, needed to produce 32.0 grans of oxygen? A) 2641 C) 192 L B) 32.0 D) 22.4 L 2. Given the unbalanced equation: $-Mg(ClO_2)_2(g) \rightarrow -MgCL_2(g) + -O_2(g)$. What is the coefficient of O_2 when the equation is balanced correctly using the smallest whole number coefficients? A) 1 C) 3 B) 2 D) 4 3. Given the reaction: $6 CO_2 + 6 H_2O - C_2 H_2O_2 + 6 O_2$ What is the local number of moles of water needed to mate 2.5 moles of $C_2 H_2O_2$ C) 2.5	YMET 33 More 19 Statchlometry a. Given the reaction $N_1(g) \rightarrow 2 N_1^2(g)$ A. Sine in the reaction $N_2(g) \rightarrow 3 H_2(g) \rightarrow 2 N_1^2(g)$ How many lifers of ammonia, measured at STP, are produced when 2.0 grame of inflorgen is completely composed on the 2.0 grame of inflorgen is completely composed on the 2.0 grame of inflorgen is completely composed on the 2.0 grame of inflorgen is completely completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)$ will completely react to produce exactly 36 liters of $N_2^1(g)(y)(y)(y)(y)(y)(y)(y)(y)(y)(y)(y)(y)(y)$	Chemistry- Unit 8 DRAI 11. Given the reaction: $2C_{2}f_{0} + 7 O_{2} \rightarrow 4 CO_{2} + 6 H_{2}O$ What is the total number of CO_{2} molecules produced when one mole of $C_{2}f_{0}$ is consumed? A) 66 02 × 10 ²⁷ B) 26 02 × 10 ²⁷ C) 3(602 × 10 ²⁷) C) 3(602 × 1	FT 34 16. Given the balanced equation: $K_{CCQ} + 8aC_{1} \rightarrow 2X + 8aC_{2}$, What is the correct formula for the product represented by the later X2 A) KC2 B) KC1 C) K D) C1 17. Given the equation: $Zn + 2 HC1 \rightarrow ZnC_{1} + H_{2}$ How many moles of HC1 would be required to produce a total of 2 moles
ermistry- Unit 8 DR 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) \rightarrow C_g H_{12}O_4(g) + 6 O_2(g).$ $measured at STP, needed to produce 32.0 grans of oxygon? A) 2841 C, 1921 B) 32.0 L D) 22.4 L C. Given the unbalanced equation: -Mg(ClO_3/cg) \rightarrow -MgCL_2(g) + -O_2(g). What is the coefficient of O_2 when the equation is balanced correctly using the smallest whole number coefficients?A) 1 C, 3 B) 2 D JC. Given the reaction:6 CO_2 + 6 H_2O - C_2 H_{12}O_4 + 6 O_2 What is the local number of moles of water needed to mate 2.5 moles of C_2 H_{12}O_2?A) 1 C, 2 D, 4 H_2O - C_2 H_{12}O_4 + 6 O_2$ What is the local number of moles of water needed to mate 2.5 moles of $C_2 H_{12}O_2$? A) 1 C, 2 D, 3 B) - C, 2 S, 2 D, 4 C, 2 S, 2 D, 4 C, 2 S, 2 D, 4 C, 2 C, 2 C, 2 D, 4 C, 2 C, 2 S, 2 D, 4 C, 2 C, 2 C, 2 D, 4 C, 2 C, 2 S, 2 D, 4 C, 2 C, 2 D, 4	MARET 33 More 19 Statchiometry a. Given the reaction $N_1(g) \rightarrow 2 N_1^2(g)$ A. Sum the reaction $N_2(g) \rightarrow 3 H_2(g) \rightarrow 2 N_1^2(g)$ How many lifers of ammonia, measured at STP, are produced when 2.80 grams of inflorgen is completely composed on the 2.00 grams of inflorgen is completely composed on the 2.00 grams of inflorgen is completely completely composed on the 2.00 grams of inflorgen is completely completely completely react to produce exactly 36 liters of $N_2(0g)(g) \rightarrow 16 CO_2(g) + 18 H_2(0)(g)$ A. Sum the reaction: $2 G_1H_{10}(g) \rightarrow 16 CO_2(g) + 18 H_2(0)(g)$ More many moles of carbon dioxide are produced for each of $N_2(0g)(g) \rightarrow 16 CO_2(g) + 10 H_2(g)$ Given the requalition: $2 G_1H_{10} + 13 G_2 \rightarrow 8 CO_2 + 10 H_2(g)$ How many moles of carbon dioxide are produced for each of botade are produced for each of the diagram completely com	Chemistry- Unit 8 The function: 11. Given the reaction: $2C_2f_2 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2O$ What is the total number of CO_2 notecules produced when one mole of C_2f_1 is consumed? A (20×10^{23}) C) ($36.02 \times$	FT 34 16. Given the balanced equation: $K_{CC}(x) + 8aC_{1} \rightarrow 2X + 8aC_{2}$, What is the correct formula for the product represented by the later X? A) KCi B) KCi C) K D) Cl 17. Given the equation: $Xn + 2 HCI \rightarrow 2nC_{1} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce 1.00 mole of cooper? A) 112 g C) 55.8 g D) 102 g 19. Given the balanced equation: NaOH + HCI \rightarrow NaO + NaO
ermistry- Unit 8 1. Given the equation: $6 CO_2(g) + 6 H_2O(h) - C_gH_1O_2(g) + 6 O_2(g)$ $Mat is the minimum number of liters of CO_2(g). massured at STP, needed to produce 32.0 grans of oxygen? A) 2841 C) 192 L B) 32.0 C) 192 L B) 32.0 C) 192 L B) 32.0 C) 192 Z C. Given the unbalanced equation: -Mg(ClO_2)_2(g)MgCL_2(g) + -O_2(g). What is the coefficient of O2 when the equation is balanced orrectly using the smallest whole number coefficients?A) 1 C) 3B) 2 D) 4C. Given the reaction:6 CO_2 + 6 H_2O - C_2 H_2O_2 + 6 O_2 What is the local number of moles of water needed to mate 2.5 moles of C_2 H_2O_2 * (2.5 E) 6 0 C) 15C. Given the balanced equation:$	YMET 33 More 19 Statchiometry Image: State 10 amonia, measured at STP, are produced when 280 grame of infrogen is completely composed at STP, are produced when 280 grame of infrogen is completely composed at STP, are produced when 280 grame of infrogen is completely composed at STP, are produced when 280 grame of infrogen is completely composed at STP, are produced when 280 grame of infrogen is completely composed at STP, are produced when 280 grame of infrogen is completely composed at STP, are produced when 280 grame of infrogen is completely completely completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely react to produce exactly 361 lites of H_2(0)(9) will completely reactly at the produce exactly 361 lites of H_2(0) will completely reactly at the produce exactly 361 lites of H_2(0) will completely reactly at the produce exactly 361 lites of H_2(0) will completely reactly at the produce exactly 361 lites of H_2(0) will completely reactly at the produce exactly 361 lites of H_2(0)	Chemistry- Unit 8 The function of the reaction: 11. Given the reaction: $2C_2f_2 + 7 O_2 \rightarrow 4 CO_2 + 6 H_2$ Must is the total number of CO_2 noticules produced when one mole of C_2f_1 is consumed? (a) $4602 + 10^2$ (b) $4602 + 10^2$ (c) $3602 + 10^2$	FT 34 16. Given the balanced equation: $K_{CC}(x) + 8aC_{1} \rightarrow 2X + 8aC_{2}$, What is the correct formula for the product represented by the later X? A) KC1 B) C1 17. Given the equation: $Zn + 2 HC1 \rightarrow ZnC_{1} + H_{2}$ How many moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce 1.00 mole of cooper? A) 112 g C) 55.8 g B) 26.0 g D) 192 g 16. Given the balanced equation: NaOH + HC1 → NaOH + H_5O What is the total number of grams of H_0 produced when
ermistry- Unit 8 C (1) (1) (1) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2	23 2011 9 Statchiometry 6. Given the reaction $N_{2}(y) + 3 N_{2}(y) - 2 N N_{3}(y)$ A. Siven the reaction $N_{2}(y) + 3 N_{2}(y) - 2 N N_{3}(y)$ More many lifers of ammonia, measured at STP, are produced when 2.0 grams of infugers is completely composed at STP, are produced when 2.0 grams of infugers is completely composed at STP, are produced when 2.0 grams of infugers is completely composed at STP, are produced when 2.0 grams of infugers is completely completely completely composed at STP. (A & B) (C) 1 (1 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2 (2	Chemistry- Unit 8 The reaction: 1. Given the reaction: $2C_{2}f_{2} + 7 O_{2} \rightarrow 4 CO_{2} + 6 H_{2}$ Must is the total number of CO_{2}, noticulas produced when one mole of $C_{2}f_{1}$ is consumed? A ($6 O_{2} + 10^{23}$) () $3(6 O_{2} + 10^{23})$ () $3(6$	FT 34 16. Given the balanced equation: $K_{CO} + 8aC_{1} \rightarrow 2X + 8aC_{2}$ What is the correct formula for the product represented by the later X2 A) KC2 B) KC1 C) K D) C1 17. Given the equation: $Zn + 2 HC1 \rightarrow ZnC_{1} + H_{2}$ How many moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce a total of 2 moles of HC1 would be required to produce 1.00 moles (copper) A) 112 g () 5.8 g B) 26.0 g () 102 g 19. Given the balanced equation: MaOH + HC1 → NaO1 + H ₂ O What is the heigh number of grams of H_2 Oproduced when 115 grams of the produce, NaC1 is formed? A) 9.0 () () 64.67
ermistry- Unit 8 C and the equation: f(x) = (x + y)(x + y)(2011 9 Stoichiometry 0. Given the reaction $N(g) + 3 H_j(g) + 2 N H_j(g)$ 0. Given the reaction $N(g) + 3 H_j(g) + 2 N H_j(g)$ More many lifers of ammonia, measured at STP, are produced when 20 grams of infrogen is completely composed at STP, are produced when 20 grams of infrogen is completely composed at STP, are produced when 20 grams of infrogen is completely composed at STP, are produced when 20 grams of infrogen is completely composed at STP, are produced when 20 grams of infrogen is completely composed at STP. (a) 44.8 (b) 12.2 (b) 50.0 (b) 22.2 (c) Given the reaction (b) 20.1 (c) Given the reaction (c) 30.1 (c) 20.1 (c) 30.1 (c) 20.1 (c) 30.2 (c) 20.1 (c) 40.2 (c) 20.1 (c) 40.2 (c) 20.1 (c) 40.2 (c) 20.1 (c) 40.2 (c) 20.2 (c) 40.2 (c) 20.1 (c) 40.2 (c) 20.2 (c) 40.2 (c) 20.2<	Chemistry- Unit 8 The reaction: 1. Given the reaction: $2C_{2}f_{2}+7O_{2}\rightarrow4CO_{2}+6H_{2}$ Must is the total number of CO ₂ molecules produced when one mole of $C_{2}f_{1}$ is consumed? A ($6C_{2} + 10^{23}$) () $3(602 + 10^{23})$ () $3(602 +$	FT 34 16. Given the balanced equation: $K_{CO}(*8aCL \rightarrow 23*8aCO_{1}$ What is the correct formula for the product represented by the latter X? A) KCO B) KCI C) K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCL_{2} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce 1.00 moles (cooper)? A) 112 g C) 55.8 g B) 26.0 g D) 192 g 19. Given the balanced equation: $NaOH + HCI \rightarrow NaOI + H_{2}O$ What is the total number of grams of H_Q produced when 116 grams of the product, NaCI is formed? A) 9.0 g C) 54.9 B) 36.9 D) 19.2 g
ermistry- Unit 8 CPR 1. Given the equation: $6 CO_{2}(g) + 6 H_{2}O(h) \rightarrow C_{g}H_{12}O_{g}(g) + 6 O_{2}(g)$ What is the minimum number of liters of CO ₂ (g), measured at S17, needed to produce 32.0 grans of arraygen? A) 264 C, 192 L B) 32.0 D) 22.4 L 2. Given the unbalanced equation: $-Mg(ClO_{2}(g) + -MgCL_{2}(g) + -O_{2}(g)$ What is the coefficient (0 v, when the equation is balanced correctly using the smallest whole number coefficient? A) 1 C, 3 B) 2 D) 4 3. Given the reaction: $6 CO_{2} + 6 H_{2} - O_{2}(H_{2}O_{2} + 6 O_{2} - 0) + 4$ 3. Given the reaction: $6 CO_{2} + 6 H_{2} - O_{2}(H_{2}O_{2} + 6 O_{2} - 0) + 16$ What is the total number of moles of valuer needed to make 25 moles of C ₄ H ₂ O ₆ ? A) 12 C) 2.5 B) 6 D) 16 4. Given the balanced equation: $2 C_{1}H_{2}(g) + 13 O_{2}(g) \rightarrow 8 CO_{2}(g) + 10 H_{2}(G)$ What is the total number of moles of C ₄ (h) thotal must react completely with 500 moles of C ₄ (h) thotal must react completely with 500 moles of C ₄ (h) that must	2011 9 Stochlometry 0. Given the reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ 1. Since the reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ 1. Some the reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ 1. Some the reaction D_j 2. J A & B D_j 9. J & B D_j 1. Steen the reaction D_j $Q_j = Q_j$ D_j 1. Steen the reaction: $Q_j = Q_j$ $Q_j = Q_j$ D_j 9. J Q_j D	Chemistry- Unit 8 The function is the total number of total number of the section is the total number of CQ, molecules produced when one mole of C4, is consumed? A) 60.22 + 10 ²³ B) 2(50.2 + 10 ²⁵) C) 3(60.2 + 10 ²⁵) C) 40.0 mole 3(10.2 + 10 ²⁵) C) 40.0 mole 4(10.2 + 10 ²⁵) C) 40.0 mole 4(FT 34 16. Given the balanced equation: $K_{CO}(*BaCL_{\rightarrow}2X*BaCC_{3}$ What is the correct formula for the product represented by the latter X? A) KCC_ B) KCI C: K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCL_{3} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total total of 2 moles of HCI would be required to produce a total total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total a 10 Given the balanced equation: MaCH + HCI \rightarrow MaCI + H ₂ O What is the hplan number of grams of H ₂ O produced when 116 grams of Ube product, MaCI is formed? A) 9.0 g C) 54.9 B) 38.9 D) 18.9 20. Given the reaction:
ermistry- Unit 8 CPR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_gH_2O_4(g) + 6 O_2(g)$ measured at STP, needed to produce 32.0 grans of arraygen? A) 264 C, 192 L B) 32.0 D) 22.4 C 2. Given the unbalanced equation: $-Mg(ClO_2)_2(g) \rightarrow -MgCL_2(g) + O_2(g)$ What is the coefficient (0, when the equation is balanced correctly using the smallest whole number coefficients? A) 1 C, 3 B) 2 D) 4 3. Given the reaction: $6 CO_2 + 6 H_2 O_2 + 6 H_2$ What is the total number of moles of water needed to mate 2.5 moles of $C_2 H_2 O_2$; A) 12 C, 2.5 B) 6 D) 15 4. Given the balanced equation: $2 C_1 H_2(g) + 13 O_2(g) \rightarrow 8 O_2(g) + 10 H_2O(g)$ What is the total number of moles of $O_2(g)$ that must react completely with 5.00 moles of O	2017 2 Stochlometry 0. Given the reaction $h(g) \neq 3 H_j(g) + 2 NH_j(g)$ 0. Given the reaction $h(g) \neq 3 H_j(g) + 2 NH_j(g)$ More and Millers of ammonia, measured at STP, are produced when 28.0 grams of nitrogen is completely composed with 28.0 grams of nitrogen is completely completely completely react to produce exactly 38 lites of H_20(g) > 16 CO_2(g) + 18 H_20(g) 0. Given the reaction: $2 (H_{u}(g) + 25 O_{u}(g) - 51 CO_2(g) + 18 H_20(g)) Wind volume of C_{u}H_{u}(g) will completely react to produce exactly 38 lites of H_20(g) > 0 & 30 L 0. Given the reaction: 2 (H_{u}(g) + 25 O_{u}(g) - 51 CO_2(g) + 18 H_20(g)) 0. Given the reaction: 2 (H_{u}(g) + 2) = 0 + 10 + 10 + 10 + 10 + 10 + 10 + 10 $	Chemistry- Unit 8 The function is the total number of Columbia produced when one mole O(2, 4) is consumed? A) (6.02×10^{23}) B) $(2(6.02 \times 10^{23}))$ B) $(2(6.02 \times 10^{23}))$ B) $(2(6.02 \times 10^{23}))$ C) $(3(6.02 \times 10^{23})))$ C) $(3(6.02 \times 10^{23})))$ C) $(3(6.02 \times 10^{23}))))$ C) $(3(6.02 \times 10^{23})))))$ C) $(3(6.02 \times 10^{23}))))))))))))))))))))))))))))))))))))$	FT 34 16. Given the balanced equation: $K_{CO}(*BaCL_{\rightarrow}2X*BaCC_{3}$ What is the correct formula for the product represented by the latter X? A) KCC_ B) KCI C: K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCL_{3} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce 1.00 moles (cooper? A) 112 g C) 5.8 s g B) 26.0 g D) 192 g 13. Given the balanced equation: $NaOH + HCI \rightarrow NaO(1 + H_2O$ What is the hplan number of grams of HQ produced when 116 grams of Use product, NaCl is formed? A) 9.0 g C) 5.4 g B) 3.8 g D) 18 g 20. Given the reaction: $C_H H_{e}^* 12 O_{2} \rightarrow 8 CO_{2} + 8 H_{2}O$
ermistry- Unit 8 PR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_gH_2O_4(g) + 6 O_2(g)$ measured at STP, needed to produce 32.0 grans of arraygen? A) 264 C, 192 L B) 32.0 D) 22.4 C 2. Given the unbalanced equation: $-Mg(ClO_2)_4(g) \rightarrow -MgCL_2(g) + O_2(g)$. Multist the coefficient (0, when the equation is balanced correctly using the smallest whole number coefficients? A) 1 C, 3 B) 2 D) 4 3. Given the reaction: $6 CO_2 + 6 D_2 - C_2 H_2O_2 + 6 O_2$ What is the total number of moles of valuer needed to make 25 moles of $C_4 H_2O_2$? A) 12 C) 2.5 B) 6 D) 16 4. Given the balanced equation: $2 C_1H_2(g) + 13 O_2(g) \rightarrow 8 O_2(g) + 10 H_2O(g)$ What is the total number of moles of $O_2(g)$ that must react completely with 500 moles of $O_2(g)$ that must	$\begin{tabular}{lllllllllllllllllllllllllllllllllll$	Chemistry- Unit 8 The reaction: 1. Given the reaction: $2C_{1}f_{1} + 7 O_{1} \rightarrow 4 CO_{2} + 6 H_{2}$ What is the total number of CO_{2} noticulas produced when one mole of $C_{1}f_{1}$ is consumed? A ($6Q \ge 10^{23}$) () $3(6Q \ge 10^{23})$ () $3(6Q \ge 10^{23})$	FT 34 16. Given the balanced equation: $K_{CO}(*BaCL_{2}2*BaCC_{-}Marching)$ What is the correct formula for the product represented by the latter X? A) KCC_ B) KCT C: K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCL_{1} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce 1.00 mole of cooper? A) 112 g C) 55.8 g B) 26.0 g D) 182 g 19. Given the balanced equation: MaCH + HCI \rightarrow NaCI + H ₂ O What is the topical moles of H ₂ O are produced when 115 grams of H ₂ O are produced when 112 liters
ermistry- Unit 8 PR 1. Given the equation: $6 CO_2(g) + 6 H_2O(f) \rightarrow C_gH_2O_4(g) + 6 O_2(g)$ measured at STP, needed to produce 32.0 grans of arraygen? A) 264 C, 192 L B) 32.0 D) 22.4 C 2. Given the unbalanced equation: $-Mg(ClO_2)_g(g) \rightarrow -MgCL_2(g) + O_2(g)$ What is the coefficient (0 c), when the equation is balanced correctly using the smallest whole number coefficients? A) 1 C, 3 B) 2 D) 4 3. Given the teachine: $6 CO_2 + 6 H_2 - O_2(H_2O_2 + O_2)$ What is the total number of moles of valuer needed to make 25 moles of $C_gH_{2}O_2$? A) 12 C) 2.5 B) 6 D) 16 4. Given the balanced equation: $2 C_1H_q(g) + 13 O_2(g) \rightarrow 8 CO_2(g) + 10 H_2O(g)$ What is the total number of moles of $O_2(g)$ that must recat completely with 500 moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the total number of moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the total number of moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the total number of moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the total number of moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the total number of moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the total number of moles of $O_2(h_2(g))$ the $H_2O(g)$ What is the reaction: $2 C_1H_2(g) + 5 O_3(g) + 4 CO_3(g) + 2 H_2O(g)$	YMET 33 More the reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ Image: The reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ More the reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ More the reaction $M(g) \neq 3 H_j(g) + 2 NH_j(g)$ More the reaction D_j More the reaction:	Chemistry- Unit 8 $DRAI$ 11. Given the reaction: $2C_{2}f_{2}+7O_{2} \rightarrow 4CO_{2}+6H_{2}$ What is the total number of CO_{2} molecules produced when one mole of CP_{4} is consumed? $A = 062 \times 10^{27}$ $B = 2(502 \times 10^{27})$ $C = 3(602 \times 10^{27})$ $C = 3(702 \times 10^{27})$ $C = 3($	FT 34 16. Given the balanced equation: $K_{CO}(+8aCL_{-} + 2X+8aCO_{-})$ What is the correct formula for the product represented by the latter X? A) KCO_{-} B) KCI C. K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCL_{1} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce 1.00 mole of cooper? A) 112 g C) 55.8 g B) 26.0 g D) 182 g 13. Given the balanced equation: MaCH + HCI \rightarrow NaCI + H ₂ O What is the total number of grams of H ₂ O produced when 116 grams of the product, NaCI is formad? A) 8.0 g C) 54 g B) 38 g D) 18 g 13. Given the reaction: $C_{H_{2}} + 12 O_{2} \rightarrow 8 CO_{2} + 8 H_{2}O$ How many moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles of H ₂ O are produced when 11.2 lifers of C ₁ H ₂ to moles
ermistry- Unit 8 PR 1. Given the equation: $6 CO_{2}(g) + 6 H_{2}O(f) \rightarrow C_{g}H_{1}O_{q}(g) + 6 O_{2}(g)$ What is the minimum number of liters of CO ₂ (g), measured at STP, needed to produce 32.0 grams of oxygen? A) 264 C) 192 L B) 32.0 L D) 22.4 L C. Given the unbalanced equation: $-Mg(ClO_{2}(g) + -MgCL(g) + -O_{2}(g))$ What is the coefficient (10, when the equation is balanced correctly using the smallest whole number coefficient (20, when the equation is balanced correctly using the smallest whole number coefficient (20, when the equation is balanced correctly using the smallest whole number coefficient (20, when the equation is balanced correctly using the smallest whole number coefficient (20, when the equation is balanced correctly using the smallest whole number coefficient (20, a) (2, b) (4) C. Given the taclal number of moles of value needed to make 2.5 moles of $C_{4}H_{4}O_{6}$? A) 12 C) 2.5 B) 6.0 D) 15 C. Given the talanced equation: $2 C_{4}H_{4}(g) + 13 O_{4}(g) \rightarrow 8 O_{4}(g) + 10 H_{2}O(g)$ What is the total number of moles of $O_{4}(g)$ that must react completely with 5.00 moles of $C_{4}H_{4}(g)$? A) 3.2.5 C) 26.5 B) 2.0 D) 10.0 C. Given the reaction: $2 C_{4}H_{4}(g) + 5 O_{4}(g) + 4 CO_{4}(g) + 2 H_{2}O(g)$ What is the total number of grams of $O_{4}(g) + 2 H_{4}O(g)$ What is the total number of moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that is the total number of moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ that must react completely with 5.00 moles of $O_{4}(g)$ (Mat is the total number of moles of $O_{4}(g)$ that must react compl	Year 9 Statehametry 1 Stateham	Chemistry- Unit 8 11. Given the reaction: 12. $2 \zeta_{1} \zeta_{2} + 7 Q_{2} \rightarrow 4 CQ_{2} + 6 H_{2}$ 13. Given the reaction: 13. $2 \zeta_{2} + 10^{23}$ 13. $2 \zeta_{2} > 10^{23}$ 13. $2 \zeta_{2} > 20^{23}$ 13. Care in the reaction: 13. Given the reaction: 13. Given the reaction: 14. $H_{2} + SQ_{2} \rightarrow 4NO + 8 H_{2}O$ 13. Given the reaction: 14. $H_{1} + SQ_{2} \rightarrow 4NO + 8 H_{2}O$ 13. Given the reaction: 14. $H_{1} + SQ_{2} \rightarrow 4NO + 8 H_{2}O$ 14. Given the reaction: 14. $H_{1} + SQ_{2} \rightarrow 4NO + 8 H_{2}O$ 15. Given the reaction: 16. Given the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Given the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. $2 N_{2} + 2 H_{2}O \rightarrow 2 NO H + H_{2}$ 17. Constant the reaction: 17. Constant the reaction	FT 34 16. Given the balanced equation: $K_{CO}(+8aC_{L} \rightarrow 2X+8aC_{D},$ What is the correct formula for the product represented by the latter X? A) KCO ₃ B) KCI C) K D) Cl 17. Given the equation: $Zn + 2 HCI \rightarrow ZnCL_{1} + H_{2}$ How many moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a total of 2 moles of HCI would be required to produce a 10. Sitem the balanced equation: NaCH + HCI \rightarrow NaCI + H ₂ O What is the total balanced equation: $R_{1}H_{2} = C_{1} \leq 5.8 \text{ g}$ B) 3.0 g C) 5.4 g B) 3.0 g C) 5.4 g B) 3.0 g D) 18 g 10. Given the reaction: $C_{1}H_{4} + 12 O_{2} \rightarrow 8 CO_{2} + 8 H_{2}O$ How many moles of H ₂ O are produced when 11.2 liters $C_{1}H_{4} \text{ sets}$. measured at STP, reacts completely? A) $0.0 C = 3.0.0$ B) $10.0 D = 0.4.0$

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Chemistry- Unit 11 DRAFT

 What is the H₃O⁺ ion concentration of a solution that has an OH⁻ ion concentration of 1.0 × 10⁻³ M? Acids and Bases Both HNO₃(aq) and CH₃COOH(aq) can be classified as Unit 13 1. Which compound is an electrolyte? (A)C₆H₁₂O₆ (C)CH₃OF 8. Given the neutralization reaction: (A) Arrhenius acids that turn blue litmus red (B) Arrhenius bases that turn blue litmus red (C) Arrhenius acids that turn red litmus blue (D) Arrhenius bases that turn red litmus blue (C) CH₃OH (D) CCl₄ (A) 1.0×10^{-3} M (B) 1.0×10^{-7} M (C) 1.0×10^{-11} M (D) 1.0×10^{-14} M $H_2SO_4 + 2 \text{ KOH} \rightarrow K_2SO_4 + 2 \text{ HOH}$ (B) CaCl, Which compound is a salt? (A)KOH (C)K₂SO₄ According to the Arrhenius theory, when a base dissolves in water it produces (A)CO₃²⁻ as the only negative ion in solution (A)KOH A student records the following observations about an unknown solution: (B)H2SO4 (D)HOH What is the H^{*} ion concentration of an aqueous solution in which the OH⁻ ion concentration is × 10⁻⁷ mole per liter?
 (A) 1 × 10⁻¹⁴ M
 (B) 1 × 10⁻¹² M (B) OH as the only negative ion in solution 9. An aqueous solution of an ionic compound turns conducts electricity
 turns blue litmus red (C) NH, as the only positive ion in solution red litmus blue, conducts electricity, and reacts with an acid to form a salt and water This compound could be (D)H⁺ as the only positive ion in solution 3 Which substance is an Arrhenius acid? The student should conclude that the unknown (A)HCI (C)KNO. (C)1 × 10-9 M (A)NH₃ (B)KOH (C) HC₂H₃O₂ (D) CH₃OH solution is most likely (B) Nal (D)1 × 10⁻² M (D)LIOH (A)an acid (C) an ester When hydrochloric acid is neutralized by sodium hydroxide, the salt formed is sodium (A) hydrochlorate (C) chloride If a solution has a hydronium ion concentration of 1 × 10⁻⁹ M, the solution is (B) a base (D) an alcohol 4. The pH of a 0.1 M solution is 11. What is the concentration of H₃O^{*} ions, in moles per liter?
 (A) 1 × 10⁻¹
 (B) 1 × 10⁻³ Which acid is almost completely ionized in a dilute solution at 298K? (A) basic and has a pH of 9 (B) basic and has a pH of 5 (C) acidic and has a pH of 9 (D) acidic and has a pH of 5 (B) chlorate (D) perchloride (A)CH,COOH (C) H.PO. (C) 1×10^{-11} (D) 1×10^{-13} (B) H,S (D)HNO, 11. Which pH indicates a basic solution? (A)1 (C)7 (B) 5 (D)12 5. What is the pH of a 0.01 M solution of HNO₃? (C) 13 (D) 14 (A)1 (B)2 12. Which of these pH numbers indicates the highest level of acidity?
(A) 5 (C) 10 (C) 10 (D) 12 6 = Which reaction represents the process of neutralization? (B)8 $(A)Mg(s) + 2 HCl(aq) \rightarrow MgCl_2(aq) + H_2(g)$ 13. Which statement describes the characteristics of an Arrhenius base? (B) HCl(aq) + KOH(aq) \rightarrow KCl(aq) + H₂O((A) It changes blue litmus to red and has a pH less than 7. (c) $Pb(NO_3)_2(aq) + CaCl(aq) \rightarrow Ca(NO_3)_2(aq) - Ca(NO_3)_2(aq)$ (B) It changes blue litmus to red and has a pH greater than 7. PbCL(s) (D)2 KClO₃(s) \rightarrow KCl(s) + 3 O₂(g) (C) It changes red litmus to blue and has a pH less than 7. 7. Which acid-base pair will always undergo a reaction that produces a neutral solution? (D) It changes red litmus to blue and has a pH greater than 7. (A) a weak acid and a weak base (B) a weak acid and a strong base 14. Red litmus will turn blue when placed in an (C) a strong acid and a weak base (D) a strong acid and a strong base aqueous solution of (A)KCI (C) CH.OH (B) KOH (D) CH3COOH Chemistry- Unit 13 DRAFT 29 DRAFT 28 Chemistry- Unit 13 Nuclear Chemistry Unit 14 The graph below represents the decay curve of a radioactive isotope. The half-life of this isotope 18. According to the equation: Which of these types of nuclear radiation has the greatest penetrating power? 8. Given the reaction: is $X \rightarrow {}^{208}_{e2}Pb + {}^{4}_{2}He$ greatest p (A)alpha $^{24}_{11}Na \rightarrow ^{24}_{12}Mg + ^{0}_{-1}e$ (C) neutron The nucleus correctly represented by X is (B) beta (D) gamma (A) ²⁰⁴₈₀Hg (B) ²¹²₈₄Po (C) ²⁰⁴₈₄Bi (D) ²¹²₈₄Pb This reaction is best described as (A) alpha decay (C) fission 2. Which type of radioactive emission has a positive charge and weak penetrating power? (B) beta decay (D) fusion (A)alpha particle (C) gamma ray 9. Which of these types of radiation has the (B) beta particle (D) neutron 19. Given the reaction: greatest penetrating power? 3. Which list of particles is in order of increasing (A)alpha (C) gamma $^{234}_{91}Pa \rightarrow X + ^{0}_{-1}e$ (B) beta (D) positron (A) 8 years (C) 45 years (A) proton \rightarrow electron \rightarrow alpha particle (D)60 years (B) 30 years When the equation is correctly balanced the nucleus represented by X is Which type of radiation has neither mass nor charge?
 (A) gamma
 (C) alpha 14. The half-life of a radioactive isotope is 20.0 minutes. What is the total amount of a 1.00-gram sample of this isotope remaining after 1.00 hour? (B) proton →alpha particle → electron (C) electron \rightarrow proton \rightarrow alpha particle (D) alpha particle \rightarrow electron \rightarrow proton $\begin{array}{c} \text{(A)}_{92}^{234}\text{U} \\ \text{(B)}_{92}^{235}\text{U} \\ \text{(C)}_{90}^{230}\text{Th} \\ \text{(D)}_{90}^{232}\text{Th} \end{array}$ (B) neutron (D) beta 4. Which type of radiation is identical in mass and charge to a helium nucleus? In the diagram below, the radiation from a radioactive source is being separated as it passes between electrically charged plates. What are the three types of radiation observed on the detector? (A) 0.500 g 11. (C) 0.250 g (A) alpha (C) positron (B) 0.333 g (D)0.125 g 20. In the equation (B) beta (D) proton 15. An original sample of a radioisotope had a mass of 10 grams. After 2 days, 5 grams of the radioisotope remains unchanged. What is the half-life of this radioisotope? $X \rightarrow \frac{226}{88} \text{Ra} + \frac{4}{2} \text{He}$ 5. Given the reaction: The symbol X represents $^{226}_{88}$ Ra $\rightarrow ^{222}_{86}$ Rn + X $(A)_{\substack{86\\90}}^{222}$ Th (B) $_{\substack{90\\90}}^{230}$ Th (C) $_{\substack{86\\90}}^{222}$ Rn (D) $_{\substack{90\\90}}^{230}$ Rn-(A)1 day (C) 5 days RADIOACTIVE Which type of emanation is represented by X? (B) 2 days (D)4 days Ð PATHWA (A) alpha particle (C) proton 16. In the equation: (B) beta particle (D) positron Θ -----21. Which equation represents a fusion reaction? 234 Pa $\rightarrow ^{234}$ U + X (A) ${}_{2}^{1}H + {}_{1}^{2}H \rightarrow {}_{2}^{4}He$ (B) ${}_{6}^{1}C \rightarrow {}_{-1}e + {}_{1}^{4}N$ (C) ${}_{22}^{23}e \cup + {}_{2}^{4}He \rightarrow {}_{24}^{241}Pu + {}_{0}^{1}n$ 6. Which equation represents alpha decay? $\begin{array}{l} \text{(A)} \ _{49}^{116} \text{In} \rightarrow \ _{50}^{150} \text{Sn} + X \\ \text{(B)} \ _{20}^{224} \text{Rn} \rightarrow \ _{91}^{234} \text{Pa} + X \\ \text{(C)} \ _{19}^{86} \text{K} \rightarrow \ _{18}^{38} \text{Ar} + X \\ \text{(D)} \ _{222}^{226} \text{Rn} \rightarrow \ _{84}^{218} \text{Po} + X \end{array}$ The X represents a (A) helium nucleus (C) proton (A)X = alpha, Y = beta, Z = gamma (B)X = gamma, Y = beta, Z = alpha (C)X = beta, Y = gamma, Z = alpha (D)X = gamma, Y = alpha, Z = beta (C) $_{92}$ (D) $_{0}^{1}n + _{13}^{27}A1 \rightarrow _{13}^{24}Na + _{2}^{4}He$ (B) beta particle (D) neutron 17. Given the nuclear reaction: 7. In the reaction $^{239}_{93}$ Np $\rightarrow ^{239}_{94}$ Pu + X, what does X 22. Which type of reaction produces energy and represent? $^{235}_{92}$ U + $^{1}_{0}$ n $\rightarrow ^{138}_{56}$ Ba + $^{95}_{36}$ Kr + 3^{1}_{0} n + energy After 30 days, 5.0 grams of a radioactive isotope remains from an original 40.-gram sample. What is the half-life of this element? 12. (A) a neutron (C) an alpha particle intensely radioactive waste products? (A) fusion of tritum and deuterium (B) fission of uranium (C) burning of heating oil (D) burning of wood (B) a proton (D) a beta particle This equation can best be described as (A) 5 days (C) 15 days (A) fission (C) natural decay (B) fusion (D) endothermic (B) 10 days (D) 20 days

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Which type of reaction does the diagram illustrate? (A) fission (C) alpha decay (D) beta decay (B) fusion -----

24. The radioactive isotope carbon-14 can be used for (A)determining the age of a sample (B)determining medical disorders (C) controlling fission reactions (D)controlling speeds of neutrons 25. Radiation used in the processing of food is

intended to (A) increase the rate of nutrient decomposition (B) kill microorganisms that are found in the (B) kill microorganisms that are found in the food (C) convert ordinary nutrients to more stable forms (D) replace chemical energy with nuclear energy

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