Q1W5-Qs. Bank-Ch. Types of compounds.

1. A monatomic ion always has one unit of charge on the species.

True/False

Indicate whether the statement is true or false.

	2.	The charge of a monatomic ion is its oxidation number.						
	3.	An ionic crystal results from packing the constituent ions such that there is net zero force of attraction and repulsion.						
Multi Identif	ple C y the	C hoice e choice that best completes the statement or answ	wers	s the question.				
	4.	A formula unit of calcium bromide has two bro	mid	le ions corresponding to each calcium ion in the compound.				
		What is the formula of calcium bromide?						
		a. CaBr	c.	Ca ₂ Br				
		b. CaBr ₂	d.	Ca ₂ Br ₂				
	5.	What are the different forms of an element in the	ne sa	ame physical state but with different structures and				
		properties called?						
		a. Metals	c.	Ores				
		b. Minerals	d.	Allotropes				
	6.	Which allotrope of carbon has a three-dimensio	onal	solid structure?				
		a. Coal	c.	Graphite				
		b. Diamond	d.	Granite				
	7.	A formula unit of magnesium chloride has two	chlo	oride ions corresponding to each magnesium ion in the				
		compound. What is the formula of magnesium	chlo	oride?				
		a. MgCl	c.	Mg ₂ Cl				
		b. MgCl ₂	d.	Mg_2Cl_2				
	8.	A substance will conduct an electric current if i	t					
		a. is wet	c.	is covalent				
		b. forms ions in solution	d.	consists of ions in the dry state				
	9.	Which of the following is the correct chemical	forn	nula for a formula unit of aluminum bromide?				
		a. AlBr ₃	c.	Al ₃ Br ₉				
		b. Al_2Br_6	d.	Al_4Br_{12}				
	10.	Based on its position in the periodic table, the n	nost	t likely charge of an iodide ion is				
		a. 1+	c.	2+				
		b. 1-	d.	7-				
	11.	Which of the following formulas is incorrect?						
		a. $Al_2(SO_4)_3$	c.	Ca(OH) ₂				
		b. AlOH ₃	d.	$(NH_4)_2S$				
	12.	The correct name for Fe_2S_3 is						
		a. iron(III) sulfide	c.	iron(II) sulfide				
		b. iron sulfide	d.	iron(I) sulfide				
	13.	Which of the following compounds can be used	1 as	a drying agent?				
		a. $CuSO_4 \cdot 5H_2O$	c.	calcium chloride dihydrate				
		b. hygroscopic alum	d.	the dihydrate of calcium sulfate				

14.	In order to separate two liquids from each other a. evaporate at the same temperature b. evaporate at different temperatures	 by distillation, they must c. both be molecular substances d. both be inorganic compounds
15.	Which of the following pairs of compounds are a. sulfuric acid and nitric acid b. ozone and O ₃	allotropes? c. Cl ₂ and Cl d. O ₂ and O ₃
16.	is an allotrope of carbon.a. Diamondb. Carbon monoxide	c. Ozoned. Black phosphorus
Completio <i>Complete e</i>	on each statement.	
17.	The name of the anion ClO_4^- is	
18.	The name of the anion PO_4^{3-} is	
19.	Forest fire releases energy in the form of	and
20.	In naming the compound PCl ₅ , the prefix used	with the second element is
21.	The second part of the name of the compound N	NF ₃ is
22.	The sulfate ion is an example of a(n)	because it contains two different elements.
23.	A(n) is one that conta	ins two, and only two, elements.
24.	CaSO ₄ \cdot 2H ₂ O is a(n) calcium and sulfate ions.	because it always contains a fixed ratio of water molecules to
25.	A chemist can often use the process of	to separate two liquids from each other.
26.	The sodium ion (Na^+) is said to have $a(n)$ sodium ion.	of 1+ because that is the charge on a
27.	A compound such as methane that contains carl	bon is generally classified as a(n)
28.	Sodium carbonate is a(n) becomes chemically bonded.	substance because it takes on water molecules, to which it
29.	Oxygen and ozone are	, or different forms of the same element.
30.	When copper sulfate pentahydrate is heated, wa copper sulfate.	ter is driven off, leaving behind
31.	Methane and propane are examples of hydrogen.	because they contain only carbon and
32.	If left outside on a table long enough, a(n)	substance, such as calcium chloride, will
33.	In the compound Al_2O_3 , the simplest ratio of ate two atoms of aluminum to three atoms of oxyge	oms in the compound, called the, is en.
34.	A(n) is one in which a	atoms are held together by covalent rather than ionic bonds.
35.	In general, compounds that do not contain carbo	on are classified as

Matching

	<i>Match each item with the correct item below.</i> a. ionic	b.	molecular
 36.	potassium nitrite		
 37.	selenium dioxide		
 38.	pentane		
 39.	diphosphorus pentasulfide		
 40.	nickel(II) bromide		
	<i>Match each item with the correct item below.</i> a. common	b.	formal
 41.	magnesium iodide octahydrate		
 42.	anhydrous gypsum		
 43.	nitric acid		
 44.	calcined magnesia		
45.	lithium hydroxide		

- Short Answer
 - 46. Elements in groups 1A and 2A in the periodic table form positively charged ions by loss of electrons. What will be the charge on an atom, if it belongs to group 1A?
 - 47. Elements in groups 5A, 6A, and 7A in the periodic table form negatively charged ions by gain of electrons. What will be the charge on an atom, if it belongs to group 6A?
 - 48. The charge on the polyatomic ion, NO₂, is 1–. What will be the formula of one formula unit of a compound between NO₂ and Be?
 - 49. A metal, magnesium, forms an ion by losing three electrons. What will be the formula of one formula unit of the ionic compound between magnesium and oxygen?
 - 50. The charge on the polyatomic ion, NO_2 , is 1–. What will be the formula of one formula unit of a compound between NO_2 and Be?
 - 51. When the dihydrate of calcium chloride is heated gently, it loses one molecule of water of hydration. Write the formulas for the initial and final compounds in this change. Initial: _____; Final: _____
 - 52. When copper sulfate is used as a desiccant, it takes on five molecules of water of hydration. Write the formulas for the initial and final compounds in this change. Initial: _____; Final: _____
 - 53. Write the formulas for sodium sulfate decahydrate and its anhydrous form. Hydrate: _____; Anhydrous form: _____
 - 54. Write the name and formula of any binary acid. Acid: _____
 - 55. Write the name and formula of any base that contains sodium. Base: _____

The diagram, Figure 5-1, shows the way two colorless liquids with different boiling points can be separated from each other by means of distillation. Answer the following questions about this diagram.



Figure 5-1

- 56. In the first few minutes after the burner is turned on, what change do you expect to see in the thermometer reading? Why?
- 57. Which of the two liquids in the flask will begin to boil first?
- 58. Describe the movement of water as it flows through the condenser.
- 59. What is the purpose of the water in the condenser?
- 60. Which liquid first begins falling from the condenser into the receiving flask?
- 61. Under what circumstances might this procedure *not* be satisfactory for separating two liquids from each other?
- 62. Of the formulas MnS and Mn_2S_2 , which is the correct formula for manganese(II) sulfide? Explain your answer.
- 63. Write the oxidation numbers of the following elements: Rb, S, Br, Be, Ga, N, Zn, Fe.
- 64. Write the formula for each of the following binary ionic compounds: cesium iodide, potassium selenide, aluminum fluoride, calcium phosphide.
- 65. Write the formula for the compound formed from each of the following pairs of elements: barium and sulfur, rubidium and chlorine, lithium and oxygen, gallium and fluorine.
- 66. Name the ionic compound represented by each formula: K₂CO₃, CaHPO₄, Na₂C₂O₄, NH₄HSO₄, Mg(MnO₄)₂.
- 67. Write the formula for the compound made from each of the following pairs of ions: cesium and sulfate ions, aluminum and hydroxide ions, beryllium and nitrate ions, ammonium and dihydrogen phosphate ions.
- 68. Write the formula for each of the following compounds containing transition elements: chromium(II) sulfate, gold(III) selenide, iron(II) phosphate, copper(I) nitride.
- 69. The metals in the following compounds can have various oxidation numbers. Predict the charge on each metal ion, and write the name of each of the following compounds: $PbSO_4$, CuCN, SnS_2 , $Bi_2(C_2O_4)_3$.

- 70. Vanadium is a transition element with multiple oxidation numbers. Write the names of the following compounds containing vanadium: V₂S₃, VF₄, V₂(SO₄)₃, V₂O₅.
- 71. Write the names of the following hydrates: $Cu(NO_3)2 \cdot 3H_2O$, $K_2C_2O_4 \cdot H_2O$, $Ni(C_2H_3O_2)2 \cdot 4H_2O$, $Na_2HPO_4 \cdot 7H_2O$.
- 72. Write the formula for each of the following hydrates: magnesium phosphate pentahydrate, aluminum nitrate nonahydrate, nickel(II) chloride hexahydrate, sodium dichromate dihydrate.
- 73. How many atoms of each element are present in five formula units of ammonium sulfite monohydrate?
- 74. Name the following molecular compounds: P_2O_3 , SiS₂, IBr₃, Se₂Cl₂.
- 75. Write the formulas for the following molecular compounds: nitrogen trifluoride, tellurium tetrabromide, tetraphosphorus trisulfide, chlorine monofluoride.
- 76. Name the following molecular compounds, all of which contain carbon: CI_4 , C_8H_{18} , C_3O_2 , $C_{10}H_{22}$.
- 77. Write formulas for an oxygen atom, ion, and molecule.
- 78. Write the symbols for the noble gas atom and the halogen ion that have the same electron configuration as the ion K^+ .

Problem

Write the formula and the name for the compound formed when the following atoms or groups of atoms combine with each other.

- 79. sodium and oxygen
- 80. aluminum and fluorine
- 81. magnesium and phosphorus
- 82. calcium and sulfate
- 83. ammonium and nitrate
- 84. aluminum and carbonate
- 85. copper (2+) and acetate
- 86. iron (3+) and sulfate
- 87. sulfur (6+) and oxygen
- 88. silicon and phosphorus

The compounds listed below are all somewhat different from the kinds of compounds you have studied. *Explain how each compound is different and write the formula for the compound.*

- 89. sodium hydride
 - a. Difference:
 - b. Formula:

90. xenon hexafluoride

- a. Difference:
- b. Formula:
- 91. bromine heptafluoride
 - a. Difference:
 - b. Formula:
- 92. sodium aluminum sulfate
 - a. Difference:
 - b. Formula:
- 93. calcium sulfate hemihydrate
 - a. Difference:
 - b. Formula:
- 94. dihydrogen difluoride
 - a. Difference:
 - b. Formula:

Q1W5-Qs Bank-Ch. Types of compounds. **Answer Section**

TRUE/FALSE

1. ANS: F

A monatomic ion is a one-atom ion, which has lost or gained electrons.

- PTS: 1 DIF: 1 REF: Page 156
- OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds.
- TOP: Apply ionic charge to writing formulas for ionic compounds. MSC: 1
- KEY: Monatomic ion

NOT: /T/ If an ion is made up of one atom, irrespective of the charge it has, it is called a monatomic ion. /F/ Correct!

2. ANS: T

The ion charge indicates how many electrons the atom has gained or lost.

- PTS: 1 DIF: 1 REF: Page 156 | Page 157
- OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds.
- TOP: Apply ionic charge to writing formulas for ionic compounds. MSC: 1
- KEY: Monatomic ion | Oxidation number

NOT: /T/ Correct! /F/ The oxidation number of an ion indicates how many electrons have been gained or lost by the atom.

3. ANS: T

During the formation of a solid ionic compound, the positive and negative ions are packed into a regular repeating pattern that balances the forces of attraction and repulsion among the ions.

PTS: 1 DIF: 1 REF: Page 170

OBJ: 5.2.1 Compare the properties of molecular and ionic substances.

- TOP: Compare the properties of molecular and ionic substances.
- KEY: Ionic bond MSC: 2
- NOT: /T/ Correct! /F/ The net charge on an ionic compound is zero.

MULTIPLE CHOICE

4. ANS: B

Two atoms of the halogen ion, each with one negative charge, will be required to balance the +2 charge on the metal ion.

	Feedback
Α	The charge on the metal ion is $+2$ and that on the halogen ion is -1 .
В	Correct!
С	Two ions of the metal with +2 charge each result into 4 positive charges, while 2
	halogen ions neutralize only two positive charges.
D	There will be an overall charge on the species formed, because the charge on each metal
	ion is double that on each halogen ion.

PTS: 1 DIF: 1 REF: Page 156

- OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds.
- TOP: Apply ionic charge to writing formulas for ionic compounds.
- KEY: Formula unit MSC: 2
- 5. ANS: D

Forms of an element in the same physical state with different structures and properties are called allotropes.

	Feedback
Α	Metals exist only in metallic forms.
В	Minerals are elements or inorganic compounds found in nature as solid crystals.
С	An ore is the material from which a mineral is removed.
D	Correct!

- PTS: 1 DIF: 1 REF: Page 175
- OBJ: 5.2.2 Distinguish among allotropes of an element.
- TOP: Distinguish among allotropes of an element. KEY: Allotropes
- MSC: 1 6. ANS: B

Diamond is the allotrope of carbon with a three-dimensional solid structure.

	Feedback
Α	Coal is the amorphous form of carbon.
В	Correct!
С	Graphite is an allotrope of carbon with flat-layered structure.
D	Granite is a substance that contains carbon.

PTS: 1 DIF: 1 REF: Page 179

OBJ: 5.2.2 Distinguish among allotropes of an element.

TOP: Distinguish among allotropes of an element.KEY: AllotropesMSC: 1

7. ANS: B

Two atoms of the halogen ion, each with one negative charge, will be required to balance the +2 charge on the metal ion.

	Feedback
Α	The charge on the metal ion is $+2$ and that on the halogen ion is -1 .
В	Correct!
С	Two ions of the metal with +2 charge each result into 4 positive charges, while 2
	halogen ions neutralize only two positive charges.
D	There will be an overall charge on the species formed, because the charge on each metal
	ion is double that on each halogen ion.

	PTS:	1 DIF:	1	REF:	Page 168 Pag	ge 169	
	OBJ:	5.1.3 Interpret the int	formation in a c	hemica	l formula.		
	TOP:	Interpret the informa	tion in a chemic	cal form	ula.	KEY:	Formula unit
	MSC:	2					
8.	ANS:	B PTS:	1	DIF:	В	OBJ:	5-4
9.	ANS:	A PTS:	1	DIF:	В	OBJ:	5-2
10.	ANS:	B PTS:	1	DIF:	В	OBJ:	5-1
11.	ANS:	C PTS:	1	DIF:	В	OBJ:	5-3

12.	ANS: A	A PTS:	1	DIF:	В	OBJ:	5-2
13.	ANS: E	B PTS:	1	DIF:	В	OBJ:	5-3
14.	ANS: E	B PTS:	1	DIF:	В	OBJ:	5-4
15.	ANS: I	D PTS:	1	DIF:	В	OBJ:	5-5
16.	ANS: A	A PTS:	1	DIF:	В	OBJ:	5-5

COMPLETION

PTS: 1

DIF: B

17. ANS: perchlorate PTS: 1 DIF: 1 REF: Page 159 OBJ: 5.1.2 Apply formulas to name ionic compounds. TOP: Apply formulas to name ionic compounds. **KEY:** Polyatomic ions MSC: 1 18. ANS: phosphate PTS: 1 DIF: 1 REF: Page 159 OBJ: 5.1.2 Apply formulas to name ionic compounds. TOP: Apply formulas to name ionic compounds. **KEY:** Polyatomic ions MSC: 1 19. ANS: heat, light light, heat PTS: 1 DIF: 1 REF: Page 168 | Page 169 OBJ: 5.1.3 Interpret the information in a chemical formula. TOP: Interpret the information in a chemical formula. **KEY:** Chemical reaction MSC: 1 20. ANS: penta PTS: 1 DIF: 1 REF: Page 180 | Page 182 OBJ: 5.2.3 Apply formulas to name molecular compounds. TOP: Apply formulas to name molecular compounds. **KEY:** Binary compounds MSC: 2 21. ANS: trifluoride PTS: 1 DIF: 1 REF: Page 180 | Page 182 OBJ: 5.2.3 Apply formulas to name molecular compounds. TOP: Apply formulas to name molecular compounds. **KEY:** Binary compounds MSC: 2 22. ANS: polyatomic ion OBJ: 5-3 DIF: B PTS: 1 23. ANS: binary compound PTS: 1 DIF: B OBJ: 5-3 24. ANS: hydrate

OBJ: 5-3

26.	PTS: ANS:	1 oxidation num	DIF: iber	В	OBJ:	5-4
27.	PTS: ANS:	1 organic compo	DIF: ound	В	OBJ:	5-1
28.	PTS: ANS:	1 hygroscopic	DIF:	В	OBJ:	5-6
29.	PTS: ANS:	1 allotropes	DIF:	В	OBJ:	5-4
30.	PTS: ANS:	1 anhydrous	DIF:	В	OBJ:	5-5
31.	PTS: ANS:	1 hydrocarbons	DIF:	В	OBJ:	5-4
32.	PTS: ANS:	1 deliquescent	DIF:	В	OBJ:	5-4
33.	PTS: ANS:	1 formula unit	DIF:	В	OBJ:	5-4
34.	PTS: ANS:	1 molecular sub	DIF: stance	В	OBJ:	5-3
35.	PTS: ANS:	1 inorganic com	DIF:	В	OBJ:	5-4
	PTS:	1	DIF:	В	OBJ:	5-4

25. ANS: distillation

MATCHING

36.	ANS:	А	PTS:	1	DIF:	В	OBJ:	5-4
37.	ANS:	В	PTS:	1	DIF:	В	OBJ:	5-4
38.	ANS:	В	PTS:	1	DIF:	В	OBJ:	5-4
39.	ANS:	В	PTS:	1	DIF:	В	OBJ:	5-4
40.	ANS:	А	PTS:	1	DIF:	В	OBJ:	5-4
41.	ANS:	В	PTS:	1	DIF:	В	OBJ:	5-2
42.	ANS:	А	PTS:	1	DIF:	В	OBJ:	5-2
43.	ANS:	А	PTS:	1	DIF:	В	OBJ:	5-2
44.	ANS:	А	PTS:	1	DIF:	В	OBJ:	5-2
45.	ANS:	В	PTS:	1	DIF:	В	OBJ:	5-2

SHORT ANSWER

46. ANS: 1+

PTS: 1 DIF: 1 REF: Page 156 OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds. TOP: Apply ionic charge to writing formulas for ionic compounds. KEY: Oxidation number MSC: 1 47. ANS: 2-REF: Page 156 PTS: 1 DIF: 1 OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds. TOP: Apply ionic charge to writing formulas for ionic compounds. KEY: Oxidation number MSC: 1 48. ANS: $Be(NO_2)_2$ PTS: 1 DIF: 1 REF: Page 156 OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds. TOP: Apply ionic charge to writing formulas for ionic compounds. **KEY:** Polyatomic ions MSC: 1 49. ANS: MgO PTS: 1 DIF: 1 REF: Page 156 OBJ: 5.1.1 Apply ionic charge to writing formulas for ionic compounds. TOP: Apply ionic charge to writing formulas for ionic compounds. KEY: Formula unit MSC: 2 50. ANS: $Be(NO_2)_2$ PTS: 1 DIF: 1 REF: Page 168 | Page 169 OBJ: 5.1.3 Interpret the information in a chemical formula. TOP: Interpret the information in a chemical formula. **KEY:** Polyatomic ions MSC: 1 51. ANS: $CaCl_2 \cdot 2H_2O; CaCl_2 \cdot H_2O$ PTS: 1 DIF: A OBJ: 5-2 52. ANS: CuSO₄; CuSO₄·5H₂O PTS: 1 DIF: A OBJ: 5-2 53. ANS: $Na_2SO_4 \cdot 10H_2O; Na_2SO_4$ PTS: 1 DIF: A OBJ: 5-2 54. ANS:

	Answers may vary; e.g. HCl, hydrochloric acid								
55.	PTS: 1 ANS:	DIF: A	OBJ:	5-2					
	Answers may vary; e.	g. NaOH; sodium hyd	lroxide						
56.	PTS: 1 ANS:	DIF: A	OBJ:	5-2					
	The temperature should begin to rise because the liquids in the flask are being heated.								
57.	PTS: 1 ANS:	DIF: B	OBJ:	5-4					
	the liquid with the low	ver boiling point							
58	PTS: 1 ANS [.]	DIF: B	OBJ:	5-4					
	Water flows from the part of the condenser	Water flows from the faucet into the lower part of the condenser, through the condenser, and out of the upper part of the condenser into the sink.							
59.	PTS: 1 ANS:	DIF: B	OBJ:	5-4					
	The water cools vapors that enter the upper part of the condenser and changes them back into a liquid.								
60.	PTS: 1 ANS:	DIF: B	OBJ:	5-4					
	the liquid with the low	ver boiling point							
61.	PTS: 1 ANS:	DIF: B	OBJ:	5-4					
	Answers may vary. Possible answers: when the two liquids have similar boiling points or when the two liquids react with each other								
62	PTS: 1 ANS [.]	DIF: B	OBJ:	5-4					
02.	A properly written formula for an ionic compound has the simplest possible ratio of the ions present. This is true for the formula MnS, but not for Mn_2S_2 , so the correct formula is MnS.								
63.	PTS: 1 ANS:	DIF: B	OBJ:	5-1					
	1+, 2-, 1-, 2+, 3+, 3-,	1+, 2-, 1-, 2+, 3+, 3-, 2+, 2+ or 3+							
64.	PTS: 1 ANS:	DIF: B	OBJ:	5-1					
	CsI, K ₂ Se, AlF ₃ , Ca ₃ P	2							
65	PTS: 1	DIF: B	OBJ:	5-1					
05.	BaS, RbCl, Li ₂ O, GaF	3							
	PTS: 1	DIF: B	OBJ:	5-1					

66. ANS:

potassium carbonate, calcium monohydrogen phosphate, sodium oxalate, ammonium hydrogen sulfate, magnesium permanganate

67.	PTS: 1 ANS: Cs ₂ SO ₄ , Al(OH) ₃ , Be	DIF: e(NO ₃) ₂	B , NH ₄ H ₂ PO ₄	OBJ:	5-2
68.	PTS: 1 ANS: CrSO ₄ , Au ₂ Se ₃ , Fe ₃ (I	DIF: PO ₄) ₂ , C	B Cu ₃ N	OBJ:	5-1
69.	PTS: 1 ANS: 2+ charge, lead(II) su oxalate	DIF: 1lfate; 1	B + charge, copp	OBJ: er(I) cy	5-1 vanide; 4+ charge, tin(IV) sulfide; 3+ charge, bismuth(III)
70.	PTS: 1 ANS: vanadium(III) sulfide	DIF: e, vanad	B lium(IV) fluorid	OBJ: de, vana	5-2 adium(III) sulfate, vanadium(V) oxide
71.	PTS: 1 ANS: copper(II) nitrate trih monohydrogen phosp	DIF: nydrate, phate he	B potassium oxal eptahydrate	OBJ: late mo	5-2 nohydrate, nickel(II) acetate tetrahydrate, sodium
72.	$\begin{array}{llllllllllllllllllllllllllllllllllll$	DIF:	В	OBJ:	5-2
73.	PTS: 1 ANS: In 5(NH ₄)2SO ₃ · H ₂ O	DIF:), there	B are 10 nitrogen	OBJ:	5-1, 50 hydrogen atoms, 5 sulfur atoms, and 20 oxygen atoms.
74.	PTS: 1 ANS: diphosphorus trioxid	DIF: e, silico	B on disulfide, iod	OBJ: ine trib	5-3 oromide, diselenium dichloride
75.	PTS: 1 ANS: NF ₃ , TeBr ₄ , P ₄ S ₃ , Cll	DIF:	В	OBJ:	5-6
76.	PTS: 1 ANS: carbon tetraiodide, or	DIF: ctane, tr	B ricarbon dioxide	OBJ: e, decar	5-6 ne
	PTS: 1	DIF:	В	OBJ:	5-6

77.	ANS: $O, O^{2^{-}}, O^{2}$				
78.	PTS: 1 ANS: Ar, Cl ⁻	DIF:	В	OBJ:	5-3
	PTS: 1	DIF:	В	OBJ:	5-3

PROBLEM

79.	ANS: Na ₂ O;	sodium oxide								
80.	PTS: ANS:	1	DIF:	В	OBJ:	5-2				
	AlF ₃ ; aluminum fluoride									
01	PTS:	1	DIF:	В	OBJ:	5-2				
81.	ANS: Mg ₃ P ₂ ; magnesium phosphide									
	PTS:	1	DIF:	В	OBJ:	5-2				
82.	ANS: CaSO ₄ : calcium sulfate									
	PTS:	1	DIF:	В	OBJ:	5-2				
83.	ANS:	ANS:								
	INH4IN	O_3 ; ammonium								
84.	PTS: ANS:	1	DIF:	В	OBJ:	5-2				
	Al ₂ (CO ₃) ₃ ; aluminum carbonate									
05	PTS:	1	DIF:	В	OBJ:	5-2				
65.	$Cu(C_2H_3O_2)_2$; copper(II) acetate									
	PTS:	1	DIF:	В	OBJ:	5-2				
86.	ANS: Fe ₂ (SO ₄) ₃ ; iron(III) sulfate									
	PTS:	1	DIF:	В	OBJ:	5-2				
87.	ANS:	ulfur triovide								
	503, S		DIE	D	ODI	5 6				
88.	ANS:	1	DIF:	В	ORI:	3-0				
	Si ₃ P ₄ ; trisilicon tetraphosphide									

89.	PTS: ANS: Hydro NaH	1 gen usually doe	DIF: es not h	B ave a charge of	OBJ: 1- in a	5-6 compound.
90.	PTS: ANS: Noble XeF ₆	1 gases usually c	DIF: lo not f	A orm compound	OBJ: s.	5-4
91.	PTS: ANS: Eleme BrF ₇	1 nts in Group 17	DIF: 7 would	A all be expected	OBJ: 1 to gai	5-4 n electrons and, therefore, not to react with each other.
92.	PTS: ANS: It is un ion. NaAl(1 ncommon for tw SO ₄) ₂	DIF: wo diffe	A erent positive el	OBJ: ements	5-4 to combine at the same time with one negative polyatomic
93.	PTS: ANS: <i>Hemih</i> anythin CaSO ₄	1 <i>sydrate</i> means h ng. $r^{-1}/_{2}H_{2}O$	DIF: nalf a m	A olecule of wate	OBJ: er of hy	5-4 dration, and it is not possible to have half a molecule of
94.	PTS: ANS: This na H ₂ F ₂	1 ame describes a	DIF: a comp	A ound larger that	OBJ: n a forr	5-4 nula unit.
	PTS:	1	DIF:	А	OBJ:	5-4