Name		Chemistry		//	_		
<b>SOL Questions – Chapter 4</b> For each of the following bubble in the letter of the best answer on the GREEN side of your scantron.							
1. Elements from which to ionic compound? a. 1 and 2	wo groups in the periodic ta	able would <i>most</i> likely com	bine with o		m an		
a. I and Z	b. 16 and 17	c. 1 and 17	u. 17 and	1 10			
<ul> <li>2. Which of the following describes what takes place when iron (Fe°) is oxidized to Fe²+ions?</li> <li>a. A gain of two electrons</li> <li>b. A loss of two electrons</li> <li>c. A gain of two protons</li> <li>d. A loss of two protons</li> </ul>							
3. The formula for lithiu a. LiN b. Li <sub>3</sub> N		d. NLi <sub>3</sub>		4			
4. Chlorine and bromine are in the same family in the periodic table. According to the information in the table to the right, what would be the correct formula for sodium bromate?  Selected Polyatomic Ions Name Formula							
a. NaBrO b. Na <sub>2</sub> F	BrO c. Na <sub>3</sub> BrO <sub>3</sub>	d. NaBrO <sub>3</sub>		Hypochlorite Chlorite	ClO <sup>-</sup>		
5 When naming a transi	tion metal that has more the	an one oxidation number, th	ne.	Chlorate	ClO <sub>3</sub>		
	ation number is indicated b			Perchlorate	ClO <sub>4</sub>		
a. Roman numeral	b. Greek prefix	c. subscript d. suffix	X		_		
<ul><li>6. An alkali metal will m</li><li>a. another alkali metal</li><li>7. Which of these is the of</li></ul>	b. an alkaline earth metal correct name for KBr?			d. a noble gas			
a. Potassium bromine	b. Potassium bromate	c. Potassium bro	omide (	d. Potassium bro	omite		
8. What is the correct for a. NH <sub>4</sub> PO <sub>4</sub>	rmula for ammonium phosp b. (NH <sub>4</sub> ) <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub>	ohate? c. (NH <sub>4</sub> ) <sub>3</sub> PO <sub>4</sub>	d. NH <sub>4</sub> (F	PO <sub>4</sub> ) <sub>3</sub>			
9. Cobalt, a transition metal, can have an oxidation number of either 2+ or 3+. Which of these represents the two possible chemical formulas for the chemical combination of cobalt with oxygen? a. CoO, Co <sub>2</sub> O <sub>3</sub> b. CoO <sub>3</sub> , Co <sub>3</sub> O <sub>2</sub> c. Co <sub>2</sub> O <sub>3</sub> , Co <sub>3</sub> O <sub>2</sub> d. CoO, Co <sub>3</sub> O <sub>2</sub>							
<ul> <li>10. Which statement describes the equation to the right?</li> <li>a. Magnesium transfers an electron to each atom of the iodine molecule.</li> <li>b. The iodine molecule transfers two protons to magnesium.</li> <li>c. Magnesium shares an electron with iodine.</li> <li>d. Iodine becomes a free monatomic element.</li> </ul>							
11. To indicate the numb a. Roman numerals	per of atoms of each element b. superscripts	nt present in a molecular con c. prefixes	mpound, s d. subscr				
12. The correct name for a. magnesium iodide	MgI <sub>2</sub> is — b. magnesium iodite	c. magnesium(II) iodide	d. magne	esium diiodide			
13. Which is the correct a. $Fe_3(SO_4)_2$	formula for iron(III) sulfate b. FeSO <sub>4</sub>	e? c. Fe <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	d. Fe <sub>2</sub> (SO	$O_3)_3$			
14. The correct formula a. AlCO <sub>3</sub>	of an ionic compound conta b. Al(CO <sub>3</sub> ) <sub>3</sub>	aining $Al^{3+}$ and $CO_3^{2-}$ is — c. $Al_2(CO_3)_3$	d. Al <sub>3</sub> (Co	$O_3)_2$			

15. The name for NH <sub>4</sub> F i	s—			
a. ammonia fluoride	g 1 .	b. ammonium fluoride		
c. nitrogen tetrahydrogen	Tiuoride	d. ammonium fluorine		
Α				
G		В		
C				
	<del></del>			
determine what type of bo	nded on Earth and created to			
containing G and E would			d an invision	
a. a metallic bond	b. a nonmetallic bond	c. a covalent bond	d. an ionic bond	
17. The correct formula fa. CuBr	for copper (I) bromide is — b. CuBr <sub>2</sub>	c. Cu <sub>2</sub> Br	d. Cu <sub>2</sub> Br <sub>3</sub>	
18. The formula for mag	nesium chloride is —			
a. MgCl <sub>2</sub>	b. MnCl <sub>2</sub>	c. Mg <sub>2</sub> Cl <sub>3</sub>	d. MnCl	
19. The correct name for	$Mg_3(PO_4)_2$ is —	67		
a. magnesium phosphite		b. trimagnesium phosphate		
c. magnesium(III) phosph	nate	d. magnesium phosphate		
20. In HNO <sub>3</sub> the oxidation oxidation state of nitrogen	on state of hydrogen is 1+ a	nd the oxidation state of ox	tygen is 2 Therefore, the	
a. 5+	b. 4+	c. 3+	d. 1-	
01 1111 1 1				
	formula for aluminum chlor		1 4101	
a. AlCl <sub>3</sub>	b. Al <sub>3</sub> Cl	c. Al <sub>2</sub> Cl <sub>3</sub>	d. AlCl	
	ng is the correct name for the			
a. Manganese fluoride(III		b. Manganese(III) fluoride		
c. Manganese(I) fluoride(	(III)	d. Manganese(III) fluorid	le(III)	
22 Cadium ablasida san	dusta alastoisita adam dissa	Jane dia annotan Wile at tanna a	fhand is amount in NaCl2	
a. Nonpolar covalent	ducts electricity when disso	b. Polar covalent	or bond is present in NaCi?	
c. Hydrogen		d. Ionic		
c. Hydrogen		u. Ionic		
24 Assauding to the same	a dia tabla. Ma:11 a at 1:1		l.:ah af these arrays 2	
a. 1	iodic table, Mg will most lib b. 3	c. 17	d. 18	
a. 1	0. 3	C. 17	u. 18	
25 What is the chemical	formula for iron(II) phospl	nide?		
a. $Fe_2P$	b. FeP <sub>2</sub>	c. Fe <sub>2</sub> P <sub>3</sub>	d. $Fe_3P_2$	
a. 1021	o. 1 c1 2	C. 1 C <sub>2</sub> 1 3	d. 1031 2	
26 Which of these comp	ounds is most likely to con	tain an ionic bond?		
a. H <sub>2</sub>	b. SO <sub>2</sub>	c. CH <sub>4</sub>	d. CaCl <sub>2</sub>	
···/_	5. 50 <sub>2</sub>			
<ul> <li>chapter 4 sol que</li> </ul>	stions quiz 1	repared to take the follow	ving Chapter 3 on-line quizzes:	
<ul> <li>chapter 4 sol que</li> </ul>	stions quiz 2			

- 28. Which of the following shows the correct number of atoms of each element in the formula Mg(NO<sub>3</sub>)<sub>2</sub>?
- a. 1 magnesium atom, 2 nitrogen atoms, and 6 oxygen atoms
- b. 1 magnesium atom, 2 nitrogen atoms, and 5 oxygen atoms
- c. 1 magnesium atom, 1 nitrogen atom, and 6 oxygen atoms
- d. 1 magnesium atom, 1 nitrogen atom, and 5 oxygen atoms
- 29. What is the name of NH<sub>4</sub>OH?
- a. Ammonium hydroxide
- c. Nitrogen hydroxide

- b. Nitrogen oxygen hydride
- d. Ammonium oxygen hydride

