Earth & Space Science - Chapter 2 Study Guide

Multiple Choice

	Identi	fν	the	choice	that	best	com	pletes	the	staten	nent	or	answers	the	auestio
--	--------	----	-----	--------	------	------	-----	--------	-----	--------	------	----	---------	-----	---------

	Write the letter that best answers the question or completes the statement on the line provided.							
 1.	An element is a substance that							
	 a. exists naturally as a solid, liquid, and gas. b. cannot be broken down into simpler substances. c. is above 86 on the periodic table. d. can be broken down only by chemical means. 							
 2.	Which particles make up atoms?							
	•	:. d.	electrons, neutrons, ions neutrons, electrons, molecules					
 3.	Which of the following is an element?							
			air carbon dioxide					
 4.	When elements are more stable in a combined form, which of the following forms?							
		:. d.	nuclei compounds					
 5.	A compound contains two or more							
	· · · ·	:. d.	elements chemically combined. nuclei combined with electrons.					
 6.	Isotopes are atoms of an element							
	a. with the same number of electrons but different numbers of protons.b. that are radioactive.c. with a magnetic charge.d. with the same number of protons but different number of neutrons.							
 7.	Chemical bonds are likely to form when							
	 a. two atoms have the same number of electrons. b. an atom's outer energy level doesn't have the maximum number of electrons. c. an atom's nucleus has the same number of protons as neutrons. d. an atom's outer energy level is filled. 							

 8.	Crystallization from cooling magma describes one way that					
		coms bond. Ins combine.	c. d.	protons attract electrons. minerals form.		
 9.	What process causes dissolved substances to be left behind to form minerals after water in lakes or pone evaporates?					
	-	recipitation nization	c. d.	condensation sublimation		
 10.	Miner	rals are classified according to their				
	a. co b. or		c. d.	composition. specific gravity.		
 11.	Which	n of these is a mineral?				
	a. ox b. di	xygen amond	c. d.	sulfuric acid wood		
 12.	Major	groups of minerals include				
		kides and carbonates. Ins and isotopes.	c. d.	silicates and magnetics. inorganics and halides.		
 13.	A min	eral CANNOT be				
		olid. ormed from once-living material.	c. d.	naturally occurring. light in color.		
 14.	To wh	nat class of minerals do gold, silver, and co	oppe	er belong?		
		arbonates ative elements	c. d.	halides sulfates and sulfides		
 15.	When	carbonate minerals come into contact w	ith I	hydrochloric acid, they		
	a. bi b. fiz	reak. zz.	c. d.	freeze. evaporate.		
 16.	Which	n of the following is a property of mineral	s?			
	a. ag b. o		c. d.	hardness size		
 17.	If a m	ineral breaks along flat or even surfaces,	it ha	9S		
		ster. acture.		cleavage. streak.		

18.	18. Which of the following is NOT a distinctive property of minerals?							
	a. greasy feel b. magnetism				double refraction streak			
19.	The Mohs scale me							
a. density of a mineral. b. a mineral's hardness. c. the luster of a mineral. d. a mineral's type of crystalline structure.								
_ 20.	Diamond is							
	a. the hardest mb. a nonmetallic		ohs scale.		the only mineral with luster. an isotope of silicon.			
	each statement. Covalent	eight	electror	nc .	elements	halides		
H	Hydrothermal	luster	mass	13	molecule	negative elements		
(Oxygen	protons	silicate		sulfur			
 21. The periodic table organizesaccording to their properties. 22. An atom with the atomic number 8 hasprotons andelectrons. (Both blanks are the same number). 								
23.	The area of the ato	om that contain	s electrons h	nas a	(n)ch	arge.		
24.	24. Particles in the nucleus of an atom are its and neutrons.							
25.	When atoms comb	oine to form cor	mpounds, the	ey g	ain, lose, or share	·		
26.	6. A(n)is the smallest particle of a covalent compound that shows properties of the compound.							
27.	7. When atoms share electrons, a(n)bond forms.							
28.	Minerals can form from very hot mixtures of water and dissolved substances calledsolutions.							
29.	The most commor	group of mine	rals is the		group.			
30	Oxides are minera	ls that contain			as well as other elemen	nts		

31.	Halite (NaCl) belongs to them sulfates/sulfides mineral group.	ineral group, while gypsum (CaSO ₄) belongs to the
32.	The words <i>metallic, glassy, pearly,</i> and <i>vitreous</i> are used	d to describe the mineral property known as
33.	Density is a property of matter that is the ratio of an ob	ject'sto its volume.
34.	The odor of rotten eggs in the streak of a mineral indica	tes that it contains
35.	The properties of a mineral depend on the	that compose it and its structure.
Short Ansv	wer	
36.	Contrast ionic, covalent, and metallic bonds.	
37.	List the five characteristics of a mineral.	
38.	Describe how temperature and pressure result in the fo	rmation of new minerals.
39.	List three of the properties that can be used to identify	minerals.