3.7			
Name:			
ranic.			

Valence Electrons Practice

The *valence electrons* are the electrons in the outermost energy level. They are always the outermost electrons.

Atoms that LOSE electrons are called **cations** and have an overall **positive** charge. Atoms that GAIN electrons are called anions and have an overall negative charge.

,,,,	that Grant electrons are called and		and have an overan n	egacive charge				
terr	nine the element's number of valen	ice	electrons (# of electro	ons in the "oute	ermost"			
ell).					W			
Exa	ample: Carbon has 4 valence electro	ons	, carbon <u>4</u>					
	_							
	fluorine		iodine		15. helium			
	lithium		silicon		16. hydrogen			
	phosphorus). oxygen		17. magnesium			
	francium		argon		18. xenon			
	calcium		2. barium		19. sulfur			
	carbon		3. potassium		20. boron			
7.	nitrogen	14	l. aluminum		21. bromine			
22	What are valence electrons of an a	+	n used for?					
22.	. What are valence electrons of an a	itor	n used for?					
23	. Which groups on the periodic table	> w:	ant to lose electrons?	What kind(s)	of elements are these			
	groups?		and to lose electrons.	vviide kiiid(5)	or ciements are these			
	B. 64p3.							
24.	. Which groups on the periodic table	e w	ant to gain electrons?	What kind(s)	of elements are these			
	groups?							
25.	. Why do the elements from questic	n 2	3 want to lose electro	ons? Why do t	ne elements from question			
	24 want to gain electrons? (HINT: The answer is the same for both questions.).							
26.	. How many valence electrons do th	e A	lkaline Earth metals h	ave? Are these	e elements very reactive?			
	Explain your answer.							
	and a state of the							
2/.	. What is the name of the atoms tha	it IC	se electrons? What i	s their overall (cnarge?			
20	. What is the name of the atoms tha	at or	ain alactrons? What i	s their overall	charge?			
20.	. vviiat is the name of the atoms tha	יו צי	ani elections: Wildt	s tricii Overali (liaige:			