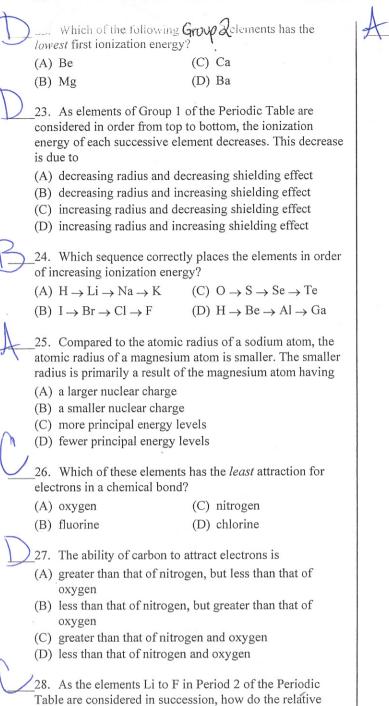
Ω		(Wastice	test)	Worksheet:	Per	iod	lic Trends	eriod Kell
10	1. Which statement best describes Group 2 elements as				11. Which sequence of elements is arranged in order of			
	they are considered in order from top to bottom of the Periodic Table?						reasing atomic radii?	(C) CI P I
		ic Table? ne number of principal	energy levels	s increases and			Al, Si, P	(C) Cl, Br, I (D) N, C, B
		e number of valence e			Λ	(D)	Li, Na, K	(D) N, C, B
	(B) The number of principal energy levels increases, and the number of valence electrons remains the same.				12. Which list of elements from Group 2 on the Periodic Table is arranged in order of increasing atomic radius?			
	(C) The number of principal energy levels remains the				(A)	Be, Mg, Ca	(C) Ba, Ra, Sr	
		me, and the number of			2	(B)	Ca, Mg, Be	(D) Sr, Ra, Ba
\cap	(D) The number of principal energy levels remains the same, and the number of valence electrons decreases.				5		As each successive elem	
_		2. What is the total number of valence electrons in an tom of boron in the ground state?			Periodic Table is considered in order of increasing atomic number, the atomic radius (A) decreases (C) remains the same			
	(A) 1		(C) 3			` '	increases	(C) remains the same
Λ	(B) 7		(D) 5		Λ	(D)	litereases	
0	3. What is the total number of valence electrons in an			14. The strength of an atom's attraction for the electrons in a chemical bond is the atom's				
		of xenon, Xe?	(C) 0			(A)	electronegativity	(C) heat of reaction
^	(A) 0 (B) 2		(C) 8 (D) 18		4	(B)	ionization energy	(D) heat of formation
1	(B) Z		(D) 10	*	7	15	Which properties are mo	ost common in nonmetals?
		4. The elements calcium and strontium have similar			15. Which properties are most common in nonmetals?(A) low ionization energy and low electronegativity			
		cal properties because	they both hav	e the same			low ionization energy ar	
		A) atomic number B) mass number C) number of valence electrons				, ,	(C) high ionization energy and low electronegativity	
	. ,				0	(D)	high ionization energy a	nd high electronegativity
	. ,	number of completely filled sublevels		5		_16. Which Group 17 element has the least attraction for electrons?		
7		n the Periodic Table o				(A)		(C) Br
		nts within Group 16 ha		27.00		(B)		(D) I
	(alence electrons nergy levels	(C) protons (D) neutron		1		*****	161
R		6. An element with a partially filled d sublevel in the			17. Which element in Group 16 has the greatest tendency to gain electrons?			
-		d state is classified as	any mica a se	iolevel in the			Te	(C) S
	_	halogen	(C) an alka	li metal	1	(B)	Se	(D) O
A	(B) a	transition metal	(D) an alka	line earth metal	A		The Group 17 element vertronegativity is	vith the highest
			ation represents a transition				fluorine	(C) bromine
	elemer	$s^2 2s^2 2p^5$	(C) [Ar]3 <i>d</i>	√ 5 _{4,a} 2	,	, ,	chlorine	(D) iodine
•	(B) [N		(C) $[Ar]3a$ (D) $[Ar]3d$		A	1.0		1 1 7 1 7 11
(. , .	8. Which element in Period 5				con	19. As the elements of Group 1 on the Periodic Table are considered in order of increasing atomic radius, the ionization energy of each successive element generally	
		transition element?					decreases	(C) remains the same
	(A) Sr		(C) Ag			` ′	increases	(c) remains are sume
\bigcirc	(B) St)	(D) Xe			, ,		
6	-	_9. Which of the following atoms has the largest atomic radius?			20. The amount of energy required to remove the outermost electron from a gaseous atom in the ground state is known as			
	(A) N	a	(C) Mg				first ionization energy	(C) conductivity
	(B) K		(D) Ca				activation energy	(D) electronegativity
	10. Which noble gas has the highest first ionization energy?				0			nber of the halogen family?
	(A) ra		(C) neon			(A)	K	(C) I
	(B) kr	ypton	(D) helium			(B)	В	(D) S



electronegativity and the covalent radius of each successive

(A) The relative electronegativity decreases, and the atomic

(B) The relative electronegativity decreases, and the atomic

(C) The relative electronegativity increases, and the atomic

(D) The relative electronegativity increases, and the atomic

element compare?

radius decreases.

radius increases.

radius decreases.

radius increases.

