Dougherty Valley HS Chemistry Periodic Trends – Practice Ranking

Worksheet #6

Name: Period: Seat#:

Review your Periodic Table Structure knowledge: 1) Where are the most 2) Where are the most 3) As you go across a period \rightarrow , does the active metals located? atomic size decrease or increase? active non-metals located? Why? 4) As you travel down a group, does the 6) Is a positive ion larger 5) Is a negative ion atomic size decrease or increase? Why? larger or smaller than or smaller than its parent atom? its parent atom? **7)** As you go from left to right 8) As you go down a group, does 9) Where is the highest electronegativity across a period, does the first the first ionization energy ionization energy generally generally decrease of increase? found? decrease or increase? Why? Why? **10)** Where is the lowest 11) Elements of Group 1A are 12) Elements of Group 2A are electronegativity found? called: called: 14) Group 7A elements are **13)** Elements in the middle of the **15)** Group 8A elements are periodic table are called: called: called: **16)** From left to right across the 17) The most active element in **18)** What type of orbitals are periodic table, do the Group 7A is: filling across the Transition elements go from metals to Elements? nonmetals, or nonmetals to metals? **19)** Elements within a group have 20) Are the majority of elements 21) Elements in the periodic table the same number of what? in the periodic table metals are arranged according to or nonmetals? their what?

22)	Li, C, F		23) Li, Na, K	24) Ge, P, O	25) C, N, Al	26) Al, Cl, Cu
Rank	the at	toms fr	om lowest to high	est ionization ene	rgy.	l
27) Mg, Si, S		S	28) Mg, Ca, Ba	29) F, Cl, Br	30) Ba, Cu, Ne	31) Si, P, He
Rank	the at	toms fr	om lowest to high	est electronegativ	ity energy.	
32) Li, C, N			33) Ne, C, O	34) Si, P, O	35) Mg, K, P	36) S, F, He
Rank	the at	toms fr	om smallest to lar	gest electron affin	ity	
	c the a t Li, C, F	toms fr	om smallest to lar	gest electron affin	ity 40) C, N, Al	41) Al, Cl, Cu
		toms fr				41) Al, Cl, Cu
		toms fr				41) AI, CI, Cu
37)	Li, C, F					41) AI, CI, Cu
37)	Li, C, F		38) Li, Na, K			41) Al, Cl, Cu
37)	e the c	orrect (38) Li, Na, K element.	39) Ge, P, O		41) Al, Cl, Cu
37) Circl	e the c	orrect o	a8) Li, Na, K element. metal	39) Ge, P, O		41) Al, Cl, Cu

Li	Si	S	metal
N	Р	As	smallest ionization energy
K	Ca	Sc	largest atomic mass
S	Cl	Ar	member of the halogen family
Al	Si	Р	greatest electronegativity
Ga	Al	Si	largest atomic radius
V	Nb	Ta	largest atomic number
Те	I	Xe	member of noble gases
Si	Ge	Sn	4 energy levels
Li	Ве	В	member of alkali metals
As	Se	Br	6 valence electrons
Н	Li	Na	nonmetal
Hg	TI	Pb	member of transition metals
Na	Mg	Αl	electron config. ending in s ² p ¹
Pb	Bi	Ро	metalloid
В	С	N	gas at room temperature
Ca	Sc	Ti	electron config. ending in s ² d ²