Dougherty Valley HS Chemistry
Periodic Trends – Practice Ranking

Worksheet #7

Name: **Period:** **Seat#:**

Review your Periodic Table Structure knowledge:

1) Where are the most active metals located?	**2)** Where are the most active non-metals located?	**3)** As you go across a period →, does the atomic size decrease or increase? Why?

4) As you travel down a group, does the atomic size decrease or increase? Why?	**5)** Is a negative ion larger or smaller than its parent atom?	**6)** Is a positive ion larger or smaller than its parent atom?

7) As you go from left to right across a period, does the first ionization energy generally decrease or increase? Why?	**8)** As you go down a group, does the first ionization energy generally decrease of increase? Why?	**9)** Where is the highest electronegativity found?

10) Where is the lowest electronegativity found?	**11)** Elements of Group 1A are called:	**12)** Elements of Group 2A are called:
13) Elements in the middle of the periodic table are called:	**14)** Group 7A elements are called:	**15)** Group 8A elements are called:
16) From left to right across the periodic table, do the elements go from metals to nonmetals, or nonmetals to metals?	**17)** The most active element in Group 7A is:	**18)** What type of orbitals are filling across the Transition Elements?
19) Elements within a group have the same number of what?	**20)** Are the majority of elements in the periodic table metals or nonmetals?	**21)** Elements in the periodic table are arranged according to their what?

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Rank the atoms from smallest to largest atomic radius

22) Li, C, F	**23)** Li, Na, K	**24)** Ge, P, O	**25)** C, N, Al	**26)** Al, Cl, Cu

Rank the atoms from lowest to highest ionization energy.

27) Mg, Si, S	**28)** Mg, Ca, Ba	**29)** F, Cl, Br	**30)** Ba, Cu, Ne	**31)** Si, P, He

Rank the atoms from lowest to highest electronegativity energy.

32) Li, C, N	**33)** Ne, C, O	**34)** Si, P, O	**35)** Mg, K, P	**36)** S, F, He

Rank the atoms from smallest to largest electron affinity

37) Li, C, F	**38)** Li, Na, K	**39)** Ge, P, O	**40)** C, N, Al	**41)** Al, Cl, Cu

Circle the correct element.

Li	Si	S	metal
N	P	As	smallest ionization energy
K	Ca	Sc	largest atomic mass
S	Cl	Ar	member of the halogen family
Al	Si	P	greatest electronegativity
Ga	Al	Si	largest atomic radius
V	Nb	Ta	largest atomic number
Te	I	Xe	member of noble gases
Si	Ge	Sn	4 energy levels
Li	Be	B	member of alkali metals
As	Se	Br	6 valence electrons
H	Li	Na	nonmetal
Hg	Tl	Pb	member of transition metals
Na	Mg	Al	electron config. ending in s^2p^1
Pb	Bi	Po	metalloid
B	C	N	gas at room temperature
Ca	Sc	Ti	electron config. ending in s^2d^2