

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 or 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?

Dougherty Valley HS Chemistry
Periodic Trends – Practice Ranking

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 |