**Name: Period: Seat#:**

**Worksheet #6**

**Review your Periodic Table Structure knowledge:**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Where are the most active metals located? | 1. Where are the most active non-metals located? | | | | 1. As you go across a period →, does the atomic size decrease or increase? Why? | | |
| 1. As you travel down a group, does the atomic size decrease or increase? Why? | | | | 1. Is a negative ion larger or smaller than its parent atom? | | | 1. Is a positive ion larger or smaller than its parent atom? |
| 1. As you go from left to right across a period, does the first ionization energy generally decrease or increase? Why? | | | 1. As you go down a group, does the first ionization energy generally decrease of increase? Why? | | | | 1. Where is the highest electronegativity found? |
| 1. Where is the lowest electronegativity found? | | 1. Elements of Group 1A are called: | | | | 1. Elements of Group 2A are called: | |
| 1. Elements in the middle of the periodic table are called: | | 1. Group 7A elements are called: | | | | 1. Group 8A elements are called: | |
| 1. From left to right across the periodic table, do the elements go from metals to nonmetals, or nonmetals to metals? | | 1. The most active element in Group 7A is: | | | | 1. What type of orbitals are filling across the Transition Elements? | |
| 1. Elements within a group have the same number of what? | | 1. Are the majority of elements in the periodic table metals or nonmetals? | | | | 1. Elements in the periodic table are arranged according to their what? | |

**Rank the atoms from smallest to largest atomic radius**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Li, C, F | 1. Li, Na, K | 1. Ge, P, O | 1. C, N, Al | 1. Al, Cl, Cu |

**Rank the atoms from lowest to highest ionization energy.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Mg, Si, S | 1. Mg, Ca, Ba | 1. F, Cl, Br | 1. Ba, Cu, Ne | 1. Si, P, He |

**Rank the atoms from lowest to highest electronegativity energy.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Li, C, N | 1. Ne, C, O | 1. Si, P, O | 1. Mg, K, P | 1. S, F, He |

**Rank the atoms from smallest to largest electron affinity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Li, C, F | 1. Li, Na, K | 1. Ge, P, O | 1. C, N, Al | 1. 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 s2p1 |
| Pb Bi Po | metalloid |
| B C N | gas at room temperature |
| Ca Sc Ti | electron config. ending in s2d2 |