*This practice packet is a general guideline to help you study. It is NOT a definitive list. There are potentially things on here that will not show up on the test, and there are potentially things not on this list that will show up on the test. Material that appeared in Warm Ups, Notes, Homework, Classwork, Labs, Study Materials, etc are all have the potential to appear on the test.*

**Start with the optional worksheets you already have!**

1. Worksheet #9\* from Chapter 4 packet

**Answer the following questions:**

|  |
| --- |
| 1. Define: reactivity, atomic radius, electronegativity, ionization energy, electron affinity
2. Describe the pattern going up/down left/right for each of the trends above
3. Explain WHY each trend happens the way it does up/down left/right. Give the BEST answer not just an ok one.
4. Where are the most active metals located?
 |
| 1. Where are the most active non-metals located?
 |
| 1. Is a negative ion is larger or smaller than its parent atom?
 |
| 1. Is a positive ion is larger or smaller than its parent atom?
 |
| 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 elements go from (metals to nonmetals) or (nonmetals to metals)?
 |
| 1. The most active element in Group 7A is
 |
| 1. What 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 non metals
 |
| 1. Elements in the periodic table are arranged according to their what?
 |
| 1. For each set of atoms, rank the atoms from smallest to largest atomic radius.
 | a) Li, C, F c) Ge, P, O e) Al, Cl, Cu b) Li, Na, K d) C, N, Al  |
| 1. For each set of atoms, rank them from lowest to highest ionization energy.
 | a) Mg, Si, S c) F, Cl, Br e) Si, P, He b) Mg, Ca, Ba d) Ba, Cu, Ne  |
| 1. For each set of atoms, rank them from lowest to highest electronegativity.
 | a) Li, C, N c) Si, P, O e) S, F, He b) Ne, C, O d) Mg, K, P  |

1. ***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