Review for Periodic Table Trends Test

1. Be able to differentiate between periods and groups on the table. How many of each exist?
2. How did Mendeleev arrange the table? What about Moseley?
3. Be able to identify trends in atomic mass and atomic number as you move across a period and down a group
4. Recognize that elements in groups/families have similar properties.
5. Know the 8 major Group A families and be able to identify each
6. Most of the elements on the table are metals. What are some physical properties of metals?
7. Which metal is a liquid at room temperature?
8. Which of the elements are non-metals and where are they located on the table?
9. Which of the elements are metalloids and what does this mean about their physical properties?
10. Where on the Periodic Table would you find the most reactive metals? The most reactive non-metals?
11. Which group/family does not typically react with other atoms at all?
12. Recognize that the periods on the table are associated with the main energy levels (quantum n)
13. Recognize that the group number (A groups) on the table represents the number of valence electrons
14. Know the trends that occur in periods and groups for Ionization energy, electronegativity and atomic radius. How do these relate to forces of attraction and Coulomb’s Law?
15. Which element is the most electronegative element on the table?
16. Be able to use the Periodic Table to write electron configurations for atoms (use s, p, d, f sub-levels i.e. 1s2 2s2 2p6 3s2 3p6 4s1 etc.). Also, be able to recognize the abbreviated electron configurations for elements.
17. Use your knowledge of the Periodic Table to write Lewis dot (Electron dot) diagrams showing the nuclear symbol and number of valence electrons
18. Use the number of valence electrons to determine which atom is the most stable/least reactive 