

OBJWS THE PERIODIC TABLE (Periodicity) - Ch. 5

Chem IH

1. Who was Dmitri Mendeleev? How did he organize the periodic table?
2. How did Moseley revise the work of Mendeleev?
3. Define the periodic law.
4. Describe the electron configurations in general of the following and give an example of each.
 - A) noble gases
 - B) representative elements
 - C) transition metals
 - D) inner transition metals
5. What is an atomic radius? What is the trend going down a group? Why is the trend the way it is?
6. What is ionization energy? What is the trend for ionization energy going down a group? Why is the trend the way it is?
7. Why is the periodic trend for ionization energy the way it is?
8. What is electronegativity? Which element has the highest electronegativity?
9. What happens to the *ionic size* in going down groups? WHY is the trend the way it is in groups?
going across periods? WHY is the trend the way it is in periods?
10. Write the electron configuration for: (any way)
 - A. Gd
 - B. Am
 - C. Po
 - D. Ac
11. What is the difference between an atom and an ion?
Give an example of each.
Write the electron configuration for the atom and the ion.