Name: _____ Period:_____ Due Date:_____

Periodic Table Homework

1. The ability of an atom to accept and electron is called its:
   a. Electron affinity
   b. Electronegativity
   c. Ionization energy
   d. Metallic character

2. The ability of an atom to attract an electron based on the number of valence electrons it has is called its:
   a. Electron affinity
   b. Electronegativity
   c. Ionization energy
   d. Metallic character

3. The energy required to remove an electron from a neutral atom is known as its:
   a. Electron affinity
   b. Electronegativity
   c. Ionization energy
   d. Metallic character

4. How readily an atom loses an electron and forms a positive ion is known as it:
   a. Electron affinity
   b. Electronegativity
   c. Ionization energy
   d. Metallic character

5. Based on the periodic trends for ionization energy, which element has the highest ionization energy?
   a. fluorine (F)
   b. nitrogen (N)
   c. helium (He)
   d. carbon (C)

6. Chromium has a smaller atomic radius than iron.
   a. True
   b. False

7. Nitrogen has a larger atomic radius than oxygen.
   a. True
   b. False

8. Which element has a higher metallic character?
   a. lead (Pb)
   b. tin (Sn)
   c. chromium (Cr)
   d. barium (Ba)

9. Which element has a higher melting point:
   a. chlorine (Cl)
   b. carbon (C)
   c. aluminium (Al)

Periodic Table Homework

d. oxygen (O)

10. Which element is more electronegative?
    a. potassium (K)
    b. sulfur (S)
    c. selenium (Se)
    d. tin (Sn)

11. Which atom has an atomic radius smaller than that of sulfur (S)?
    a. oxygen (O)
    b. chlorine (Cl)
    c. calcium (Ca)
    d. lithium (Li)

12. Which atom has an electron affinity greater than that of sulfur (S)?
    a. oxygen (O)
    b. chlorine (Cl)
    c. calcium (Ca)
    d. lithium (Li)

13. Rewrite the following list in order of decreasing electron affinity: fluorine (F), phosphorous (P), sulfur (S), boron (B).

14. Rewrite the following in order of increasing metallic character: barium (Ba), platinum (Pt) aluminium (Al), zinc (Zn),

15. Order the following elements in order of increasing ionization energy: Chlorine (Cl), Radium (Ra), Gallium (Ga), Palladium (Pd)