

Use your notes and periodic table to complete this worksheet.

1. Define the following:
 - a. Atomic radius _____

 - b. Ionization energy _____

 - c. Electronegativity _____

2. Describe the periodic trend for atomic radius across a period and down a group: _____

3. Describe the periodic trend for ionization energy across a period and down a group: _____

4. Describe the periodic trend for electronegativity across a period and down a group: _____

5. Rank the following elements by increasing atomic radius: carbon, aluminum, oxygen, potassium. _____

6. Rank the following elements by increasing electronegativity: sulfur, oxygen, neon, aluminum. _____

7. Why does fluorine have a higher ionization energy than iodine? _____

8. Circle the atom in each pair that has the largest radius.
 - a. Al or B
 - b. Na or Al
 - c. S or O
 - d. O or F
 - e. Br or Cl
 - f. Mg or Ca
9. Circle the atom in each pair that has the greater ionization energy.
 - a. Li or Be
 - b. Ca or Ba
 - c. Na or K
 - d. P or Ar
 - e. Cl or Si
 - f. Li or K
10. Circle the atom in each pair that has the greater electronegativity.
 - a. Ca or Ga
 - b. Br or As
 - c. Li or O
 - d. Ba or Sr
 - e. Cl or S
 - f. O or S