

Name: _____

Date: _____

Periodic Trends Worksheet



Directions: Use your notes to answer the following questions.

1. Why do elements in the same family generally have similar properties?
2. 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
3. Rank the following elements by increasing atomic radius: carbon, aluminum, oxygen, potassium.
4. Why does fluorine have a higher ionization energy than iodine?
5. Rank the following elements by increasing electronegativity: sulfur, oxygen, neon, aluminum.
6. What trend in ionization energy occurs across a period on the periodic table? What causes this trend?
7. What trend in atomic radius occurs across the periodic table? What causes this trend?
8. Indicate whether the following properties increase or decrease from left to right across the periodic table.
 - a. atomic radius (excluding noble gases)
 - b. first ionization energy
 - c. electronegativity