

Extra Practice: Periodic Trends

Name: _____

1. **ATOMIC RADIUS:** For each of the following sets of atoms, rank the atoms from *smallest to largest* atomic radius.

a. Li, C, F → _____

b. Li, Na, K → _____

c. Ge, P, O → _____

d. C, N, Al → _____

e. Al, Cl, Ga → _____

2. **IONIC RADIUS:** For each of the following sets of ions, rank them from *smallest to largest* ionic radius.

a. Mg^{2+} , Si^{4-} , S^{2-} → _____

b. Mg^{2+} , Ca^{2+} , Ba^{2+} → _____

c. F^- , Cl^- , Br^- → _____

d. Ba^{2+} , Cu^{2+} , Zn^{2+} → _____

e. Si^{4-} , P^{3-} , O^{2-} → _____

3. **IONIZATION ENERGY:** For each of the following sets of atoms, rank them from *lowest to highest* ionization energy.

a. Mg, Si, S → _____

b. Mg, Ca, Ba → _____

c. F, Cl, Br → _____

d. Ba, Cu, Ne → _____

e. Si, P, He → _____

4. **ELECTRONEGATIVITY:** For each of the following sets of atoms, rank them from *lowest to highest* electronegativity.

a. Li, C, N → _____

b. C, O, Ne → _____

c. Si, P, O → _____

d. K, Mg, P → _____

e. S, F, He → _____