

## PERIODIC TRENDS PRACTICE

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Pd: \_\_\_\_\_

1. **ATOMIC RADIUS** - For each of the following sets of atoms, rank from **SMALLEST** to **LARGEST** atomic radius.

a. S, Si, Te, Cl → \_\_\_\_\_

b. P, Au, In, F → \_\_\_\_\_

c. Cd, Ba, Zr, Sb → \_\_\_\_\_

d. Ag, Ba, Ga, Fr → \_\_\_\_\_

e. Ra, Ni, Al, H → \_\_\_\_\_

2. **IONIC RADIUS** - For each of the following, determine which particle has the **LARGEST** ionic radius.

a.  $\text{Mg}^{2+}$  vs Mg → \_\_\_\_\_

b.  $\text{Se}^{2-}$  vs Se → \_\_\_\_\_

c. Al vs  $\text{Al}^{3+}$  → \_\_\_\_\_

d. S vs  $\text{S}^{2-}$  → \_\_\_\_\_

e.  $\text{P}^{3-}$  vs P → \_\_\_\_\_

3. **IONIZATION ENERGY** - For each of the following sets of atoms, rank from **LOWEST** to **HIGHEST** ionization energy.

a. Zn, Ra, Pd, Os → \_\_\_\_\_

b. W, Sn, Ba, Cd → \_\_\_\_\_

c. Br, F, Cl, Fe → \_\_\_\_\_

d. I, Cs, Pt, Ag → \_\_\_\_\_

e. N, Si, O, P → \_\_\_\_\_

4. **ELECTRONEGATIVITY** - For each of the following sets of atoms, rank from **LOWEST** to **HIGHEST** electronegativity.

a. C, Li, F, O → \_\_\_\_\_

b. Cr, N, Sc, B → \_\_\_\_\_

c. S, P, Zn, Rb → \_\_\_\_\_

d. Mg, N, K, Si → \_\_\_\_\_

e. Pt, Ga, W, Ag → \_\_\_\_\_