

Key Q's and Vocab – Periodic Trends

Vocab:

1. **Atomic radius** – measure of the distance from the nucleus to the outermost VE (size of atom)
2. **Electronegativity** – measure of attraction between the nucleus and an adjacent atoms outermost electrons
3. **Ionic radius** – radius of an ion after it has gained or lost electrons
4. **Isoelectric** – two species that will have identical electronic structure
5. **Chemical reactivity** – elements within same groups have similar chemical properties because they have similar electronic structures

Key Questions:

1. Explain what shielding is and how it affects Coulombic attraction.
2. Explain how determining the location of VE is a vital piece of information to provide when arguing periodic trends. (hint: you MUST relate it to Coulomb's Law)
3. Explain how nuclear charge relates to Coulombic interaction. Include why it is not necessary when VE are in different energy shells. (hint: the answer to the second part is NOT distance matters more)
4. An element and an ion are isoelectric. Justify what will determine the strength of the coulombic attraction.