

A Few introductory Questions about Periodicity

1. What are the trends within a series regarding each of the following four dependent variables?: Ionization energy, electron affinity, electronegativity, and atomic radius.
2. What are the trends within a family?
3. Which is larger--K or Na? P or S?
4. From which of the following is it harder to remove an electron? Mg or Ba? Fe or Zn?
5. Which of the following holds a shared pair of electrons the tightest? S or O? Li or Na?
6. Explain why Cl is smaller than S. (How can it be smaller if it has more stuff in it?)
7. Why is it so difficult to remove an electron from F and so easy to remove one from K? (even though potassium has more protons)
8. What is the relationship between size and ionization energy?
9. What is the relationship between size and electronegativity?