**Warmup: IE and EA**

1. What is ionization energy?
2. How does IE change as you go down a group? Why?
3. How does IE change as you go LtoR across a period? Why?
4. What is electron affinity?
5. How does EA change as you go down a group? Why?
6. How does EA change as you go LtoR across a period? Why?

**Warmup: IE and EA**

1. What is ionization energy? ***Ionization energy is the energy required to remove an electron***
2. How does IE change as you go down a group? Why? ***IE decreases down a group because there are more energy levels. The electrons are further from the nucleus and easier to remove (lower IE).***
3. How does IE change as you go LtoR across a period? Why? ***IE increases as you go across a period (LtoR) because there are more protons in the nucleus and they can better attract in the electrons (harder to remove)***
4. What is electron affinity? ***EA is the energy released when an electron is added***
5. How does EA change as you go down a group? Why? ***EA decreases down a group because the atomic radius is increasing (more energy levels) and the valence is shell is further from the nucleus (harder to attract in an electron)***
6. How does EA change as you go LtoR across a period? Why? ***EA increases across a period (LtoR) because there are more protons in the nucleus (smaller AR) and the valence shell is closer so it is easier to attract in an electron – release more energy***