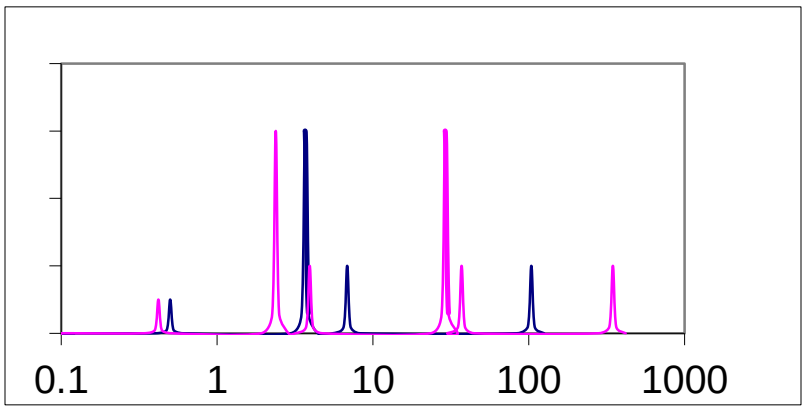
Reviewing ionization energy

1. What is ionization energy?

2. Look at the PES graph. Sodium is in blue, potassium is in pink.

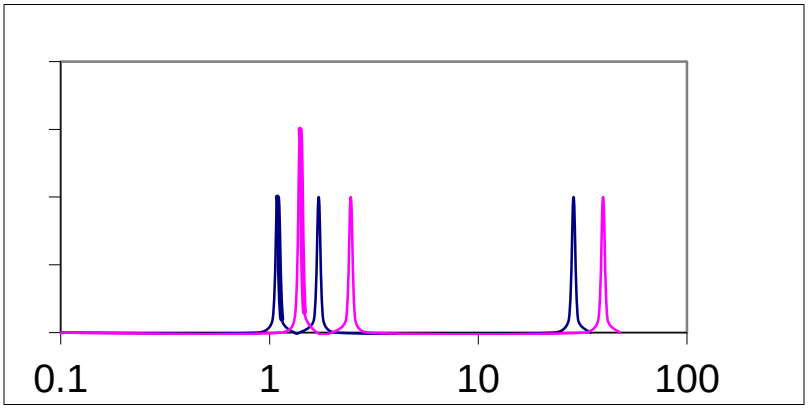


   a. What do you notice about the location of sodium and potassium on the periodic table?

   b. Would it be more challenging to move the outermost electron of sodium or potassium?

   c. Fill in the blank: as you go DOWN a group on the periodic table, it takes _____ (more/less) energy to remove the outermost electron. Why do you think this trend is?

3. Look at the PES graph. Carbon is in blue, nitrogen is in pink.



   a. What do you notice about the location of carbon and nitrogen on the periodic table?

   b. Would it be more challenging to move an electron from the outermost orbital or carbon or nitrogen?

   c. Fill in the blank: as you go ACROSS a group, left to right, on the periodic table, it takes _____ (more/less) energy to remove the outermost electron. Why do you think this trend is?

Put it all together!!! Ionization energy _____ as you go DOWN group, and

_____ as you go from LEFT to RIGHT across the periodic table