

## Ch8/ PowerPoint Study-3Electronic Configuration-Periodic Properties

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

Answer these questions as you are watching the videos. They are due in class.

These questions are not just for you to answer but also to prepare you for the exam.

Make sure you understand what you are writing and not just copy from the text book. Show all work.

1) Explain the following terms:

a) Ionization energy:

b) Electron affinity:

2) Circle the element with the

a) higher ionization energy:      Li or Be                      Na or K                      S or Br

b) higher electron affinity:      Li or Be                      Na or K                      S or Br

c) larger cationic radii:       $\text{Li}^+$  or  $\text{Be}^{2+}$                        $\text{Na}^+$  or  $\text{K}^+$

d) larger anionic radii:       $\text{S}^{2-}$  or  $\text{Cl}^-$                        $\text{N}^{3-}$  or  $\text{P}^{3-}$

3) Identify the pairs that are isoelectronic and write how many electrons the pairs have.

Li,  $\text{Be}^{2+}$ ,  $\text{Mg}^{2+}$ , Ne,  $\text{Cl}^-$ ,  $\text{S}^{2-}$ , Ar, F<sup>-</sup>,  $\text{Na}^+$

4) Write three properties of metals that can help you distinguish them from non metals.

5) Circle the acidic oxides from the oxides given:  $\text{Na}_2\text{O}$      $\text{SO}_2$      $\text{NO}_3$      $\text{CaO}$