**Periodic Table Quiz Review**

If you understand these, you should do well on the quiz:

1) Determine what group of the periodic table is described by each of the following:

a) An element that conducts electricity when it is a solid:

b) An element that is reactive, but less so than alkali metals:

c) A group of elements that consists only of radioactive elements:

d) The general qualities of this group on the periodic table consist of elements that are somewhat unreactive, have high melting and boiling points, conduct electricity only as a solid, and consist mainly of elements that are not radioactive:

e) These elements conduct electricity when heated or voltage is applied to them:

2) Why is chlorine so electronegative?

3) Why are polonium atoms larger than selenium atoms?

4) The 1st ionization energy of potassium is 419 kJ/mol and its 2nd IE is 3052 kJ/mol. Explain why the 2nd ionization energy of potassium is so much higher than the first.

5) What is the shielding effect?

6) How is atomic radius determined?