**Periodic Table Review Answer Key**

Part A: Physical Properties of Families

Alkali Metals

* Soft
* Tarnish Rapidly
* Low melting points
* Low densities
* Violently reactive

Alkaline Earth Metals

* Softer than other metals
* React with water
* 2 valence electrons
* Easily lose electrons

Transition Metals

* Hard
* High densities
* High melting and boiling points
* Ductile and malleable
* Good conductors of heat and electricity

Other Metals

* Softer than transition metals
* Lower boiling and melting points
* Electropositive

Metalloids

* Metal and non-metal qualities
* Act as semiconductors

Nonmetals

* Insulators or semiconductors
* Acidic oxides
* Electronegative

Halogens

* Toxic
* Colored
* Poor conductors
* Low melting and Boiling Points

Noble Gases

* Stable
* Colorless
* Odorless
* Inert (do not readily react with other elements)

Part B

1. The least reactive Alkali metal is Francium.
2. The least reactive Alkali metal is Lithium.
3. The least reactive Halogen is Fluorine.
4. Hydrogen is the element with zero neutrons.
5. The most reactive Alkaline Earth metal is Radium.
6. The least reactive Alkaline Earth metal is Beryllium.
7. The densest Noble Gas is Radon.
8. The lightest Noble Gas is Helium.
9. Mercury is the Transition metal in group 12 period 6.
10. Yttrium is the Transition metal in group 3 period 5.

Part C

1. Gold 196.97 – 79 = 117.97
2. Silver 107.87 – 47 = 60.87
3. Lead 207.2 – 82 = 125.2
4. Copper 63.546 – 29 = 34.546
5. Bromine 79.904 – 39 = 40.904

Part D

Copper’s Properties

Malleable, ductile, shiny luster, good conductor of heat and electricity, high melting and boiling point

Part E

Coal’s Properties (Carbon)

Brittle, dull luster, good conductor of heat and electricity (which is rare for most nonmetals!) lower melting and boiling point