

## Quiz 2.2 – Periodic Table Quiz

Name: Key

## Problem 1

Given the masses and abundances of isotopes listed below, what is the atomic weight of Gallium?

|               | <sup>69</sup> Ga | <sup>71</sup> Ga |
|---------------|------------------|------------------|
| Mass (amu)    | 68.925581        | 70.924705        |
| Abundance (%) | 60.108%          | 39.892%          |

$$0.60108 \cdot 68.925581 \text{ amu} + 0.39892 \cdot 70.924705 \text{ amu}$$

$$69.723 \text{ amu}$$

## Problem 2

Classify each of the following elements as a *metal*, *non-metal*, or *metalloid*

- |           |                  |                               |
|-----------|------------------|-------------------------------|
| Carbon    | <i>non-metal</i> | <i>Main Group</i>             |
| Samarium  | <i>Metal</i>     | <i>Inner Transition Metal</i> |
| Aluminum  | <i>Metal</i>     | <i>Main Group</i>             |
| Arsenic   | <i>metalloid</i> | <i>Main Group</i>             |
| Sulfur    | <i>non-metal</i> | <i>Main Group</i>             |
| Antimony  | <i>metalloid</i> | <i>Main Group</i>             |
| Potassium | <i>Metal</i>     | <i>Main Group</i>             |

## Problem 3

Give the name of the family for each of the following elements

- |           |                             |                         |
|-----------|-----------------------------|-------------------------|
| Chlorine  | <i>Halogen</i>              | <i>Main Group</i>       |
| Lithium   | <i>Alkali Metal</i>         | <i>Main Group</i>       |
| Neon      | <i>Noble Gas</i>            | <i>Main Group</i>       |
| Silver    | <i>Coinage Metal</i>        | <i>Transition Metal</i> |
| Magnesium | <i>Alkaline Earth Metal</i> | <i>Main Group</i>       |

## Problem 4

For each of the elements above, also classify them as being in the *main group*, *transition metals*, or *inner transition metals*