**Chemistry Unit Test**

- Atoms, The Periodic Table, Bohr Diagrams, Compounds, Changes –

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

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part A: Three Column Matching** ( / 40 Total Points)

Match the elements in Column B with their elemental symbols in Column A.

Match the elements in Column B with the most appropriate use in Column C.

*Column A* *Column B* *Column C*

A. Al \_\_\_\_ Calcium \_\_\_\_ A. Air

B. Ar \_\_\_\_ Hydrogen \_\_\_\_ B. Air Pressure in Planes

C. B \_\_\_\_ Potassium \_\_\_\_ C. Balloons

D. Be \_\_\_\_ Helium \_\_\_\_ D. Bananas

E. C \_\_\_\_ Argon \_\_\_\_ E. Batteries

F. Ca \_\_\_\_ Lithium \_\_\_\_ F. Coal

G. Cl \_\_\_\_ Chlorine \_\_\_\_ G. Fertilizers

H. F \_\_\_\_ Beryllium \_\_\_\_ H. Flares

I. H \_\_\_\_ Sulfur \_\_\_\_ I. Gun Powder

J. He \_\_\_\_ Boron \_\_\_\_ J. Implants

K. K \_\_\_\_ Phosphorus \_\_\_\_ K. Insulation

L. Li \_\_\_\_ Carbon \_\_\_\_ L. Light bulbs

M. Mg \_\_\_\_ Silicon \_\_\_\_ M. Matches

N. N \_\_\_\_ Nitrogen \_\_\_\_ N. Milk

O. Na \_\_\_\_ Aluminum \_\_\_\_ O. Novelty/Advertising Lights

P. Ne \_\_\_\_ Oxygen \_\_\_\_ P. Petroleum

Q. O \_\_\_\_ Magnesium \_\_\_\_ Q. Pool Maintenance

R. P \_\_\_\_ Fluorine \_\_\_\_ R. Salt

S. S \_\_\_\_ Sodium \_\_\_\_ S. Tinfoil

T. Si \_\_\_\_ Neon \_\_\_\_ T. Toothpaste

**Part B:Multiple Choice** ( / 4 Points )

1 ) What is the chemical formula for the common compound, Methane:

 (a) CO (b) CO2

 (c) C4H (d) CH4

\*\* Use the blank Periodic Table to answer the remaining questions:



2 ) Which classification is below letter A?

 (a) Alkali Metals (b) Noble Gases

 (c) Transitional Metals (d) Halogens

3 ) Which classification is below letter B?

 (a) Alkali Metals (b) Noble Gases

 (c) Transitional Metals (d) Halogens

4 ) Which period is represented by letter C?

 (a) Alkali Metals (b) 3

 (c) 4 (d) Noble Gases

**Part C: Short Answer** ( / 8 Points )

1 ) Use your knowledge of subatomic particles to complete the following table:

 ( / 4 Points)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Element** | **Atomic #** | **Atomic Mass** | **Protons** | **Neutrons** | **Electrons** |
| Li | 3 | 7 |  |  |  |
| Cl |  | 35 | 17 |  |  |
| Ag | 47 |  | 61 |  |  |
| W |  |  | 74 | 110 |  |

2 ) Complete a Bohr Diagram for the element, Oxygen: ( / 2 Points)

3 ) List the two types of compounds & provide a brief description of each: ( / 2 Points)