**Elements and the Periodic Table Notes**

Element – a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that cannot be broken down into simpler forms

* Made of only 1 type of \_\_\_\_\_\_\_\_\_\_\_\_

Element symbol – abbreviated form of the element’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* First letter is always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Following letters are always \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Naming Elements:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ name
* Named after \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Named after \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

There are \_\_\_\_\_\_\_\_\_\_ naturally occurring elements

You will be memorizing 46 Elements and their Symbols!

Hydrogen\_\_\_\_\_\_\_\_\_\_ Helium\_\_\_\_\_\_\_\_\_\_\_\_\_ Lithium\_\_\_\_\_\_\_\_\_\_\_\_

Beryllium\_\_\_\_\_\_\_\_\_\_ Boron \_\_\_\_\_\_\_\_\_\_\_\_\_ Carbon \_\_\_\_\_\_\_\_\_\_\_\_

Nitrogen\_\_\_\_\_\_\_\_\_\_\_ Oxygen\_\_\_\_\_\_\_\_\_\_\_\_\_ Flourine\_\_\_\_\_\_\_\_\_\_\_\_

Neon \_\_\_\_\_\_\_\_\_\_\_\_ Sodium\_\_\_\_\_\_\_\_\_\_\_\_\_ Magnesium\_\_\_\_\_\_\_\_\_

Aluminum\_\_\_\_\_\_\_\_\_\_ Silicon \_\_\_\_\_\_\_\_\_\_\_\_\_ Phosphorus\_\_\_\_\_\_\_\_\_

Sulfur \_\_\_\_\_\_\_\_\_\_\_\_ Chlorine\_\_\_\_\_\_\_\_\_\_\_\_ Argon \_\_\_\_\_\_\_\_\_\_\_\_

Potassium\_\_\_\_\_\_\_\_\_\_ Calcium\_\_\_\_\_\_\_\_\_\_\_\_ Titanium\_\_\_\_\_\_\_\_\_\_\_

Vanadium\_\_\_\_\_\_\_\_\_\_ Chromium\_\_\_\_\_\_\_\_\_\_ Iron \_\_\_\_\_\_\_\_\_\_\_\_

Cobalt \_\_\_\_\_\_\_\_\_\_\_\_\_ Nickel \_\_\_\_\_\_\_\_\_\_\_\_ Copper \_\_\_\_\_\_\_\_\_\_\_\_

Zinc \_\_\_\_\_\_\_\_\_\_\_\_\_ Gallium\_\_\_\_\_\_\_\_\_\_\_\_ Arsenic\_\_\_\_\_\_\_\_\_\_\_\_

Selenium\_\_\_\_\_\_\_\_\_\_\_ Bromine\_\_\_\_\_\_\_\_\_\_\_ Krypton\_\_\_\_\_\_\_\_\_\_\_\_

Silver \_\_\_\_\_\_\_\_\_\_\_\_ Cadmium\_\_\_\_\_\_\_\_\_\_\_ Tin \_\_\_\_\_\_\_\_\_\_\_\_\_ Antimony\_\_\_\_\_\_\_\_\_\_\_ Iodine \_\_\_\_\_\_\_\_\_\_\_\_ Xenon \_\_\_\_\_\_\_\_\_\_\_\_

Tungsten\_\_\_\_\_\_\_\_\_\_\_ Platinum\_\_\_\_\_\_\_\_\_\_\_\_ Gold \_\_\_\_\_\_\_\_\_\_\_\_

Mercury\_\_\_\_\_\_\_\_\_\_\_ Lead \_\_\_\_\_\_\_\_\_\_\_\_\_ Radon \_\_\_\_\_\_\_\_\_\_\_\_

Uranium\_\_\_\_\_\_\_\_\_\_\_

Organizing the Elements

John Newlands (1864)

* Arranged elements by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Meyer and Mendeleev (1869)

* Arranged elements by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Moseley (1913)

* Arranged elements by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Periodic Table of Elements** –

Groups –

* Elements in same group have very similar \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Periods –

* Patterns of similar properties \_\_\_\_\_\_\_\_\_\_\_\_\_ with each period

Classification

**Metals**

* Found on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of periodic table

**Nonmetals**

* Found on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of periodic table

**Metalloids**

* Found \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of periodic table

Compounds – made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ elements that are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ combined

* Examples:
* Can be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into simpler substances
* Properties of compounds - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than the elements that make them up

Mixture – a combination of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ substances that \_\_\_\_\_\_\_\_\_\_\_\_\_ chemically combine

* Each substance keeps its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Mixtures Compounds | |
|  |  |
|  |  |
|  |  |
|  |  |

Solution –

Solute –

Solvent –