***Unit 5 Periodic Trends:***

***Vocabulary – #1***

Copy these words and definitions into your science composition/notebook.

(Note – you do not have to write \*\* information – use for ideas for pictures/sentences)

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| Periodic table | - the arrangement of the elements in order of their atomic numbers so that elements with similar chemical and physical properties are located in the same column  *\*\*Note- the periodic table is easiest read like a graph (think x and y axis)* |  |
| Periodic law | - a natural law that states that physical and chemical properties of the elements are periodic functions of their atomic numbers |  |
| Groups/Families | -the 18 columns of the periodic table that contain elements with similar chemical and physical properties based on having the same number of valence electrons |  |
| Periods | - the 7 horizontal rows of elements in the periodic table lined up based on having electrons in the same energy levels |  |
| Metals | - are easily recognized by their characteristic luster or shine; also good conductors of heat and electricity; most are malleable, ductile, and solid  *\*\*Note- Groups 1-12 all are metals, except H. Also some elements in Groups 13-16 are metals.*  *\*\*Example- Li, Ca, Cu, Au, Al, Pb* |  |
| Semimetals (metalloids) | -these elements have some properties of metals and some of nonmetallic forming a staircase in-between metals and nonmetals  *\*\*Example- B, Si, Ge, As, Sb, Te, At* |  |
| Valence electrons | - electrons in the outermost energy level of an atom  *\*\*Example- Li has 1 valence electron (it is in Group 1); O has 6 valence electrons (it is in Group 16)* |  |
| Luster | A property of metal allowing light to reflect off the surface making it look shiny |  |
| Ductile | A property of metal allowing it to be pulled out into a thin wire |  |
| Malleable | A property of metal allowing it to be bent or pounded into different shapes |  |
| Conductor | A property of metal that allows the flow of electricity and/or heat |  |