**Atomic Structure**

* List and explain all three sub atomic particles of an atom
* Explain how those particles are arranged in an atom
* Draw a sodium Bohr model atom and label the P,N,E, electron cloud, and nucleus

**Periodic Table**

* Explain how Mendeleev’s periodic table differs from Moseley’s
* Explain the trends or ways elements are arranged on the periodic table
* Hydrogen is located on group 1 of the periodic table but also has similar properties as elements found in group 17. Explain why Hydrogen acts like both group 1 and 17. (hint – shells)

**Molecules, compounds, mixtures**

* Explain the difference between a compound and a molecule
* Write the chemical formula for the following and label them as a compound, molecule, or both:
  + Water, carbon dioxide, oxygen (as its found in the air), and sugar
* What is the difference between a heterogeneous and homogenous mixture. Provide 2 examples of each.

**Element Practice**

|  |  |  |  |
| --- | --- | --- | --- |
| **Element Name** | silicon | Arsenic | Magnesium |
| **Atomic symbol** |  |  |  |
| **Atomic #** |  |  |  |
| **Atomic Mass** |  |  |  |
| **Protons** |  |  |  |
| **Neutrons** |  |  |  |
| **Electrons** |  |  |  |
| **Valence Electrons** |  |  |  |
| **G (group)**  **P (period)** |  |  |  |
| **Metal, nonmetal, metalloid** |  |  |  |

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