Vocabulary – The Mole #1

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|  | Term | Definition | Drawing or Use in a Sentence |
| 1 | Dimensional Analysis | A way to convert between units using equivalents measures as fractions. |  |
| 2 | Average Atomic Mass | Average of the masses of the isotopes of an element as found in nature. This is the number listed on the periodic table for the mass of one atom of an element. |  |
| 3 | Atomic Mass Unit (amu) | Unit used to express the mass of one atom relative to Carbon-12. One amu is equal to 1/12th the mass of a carbon-12 atom. |  |
| 4 | Formula Mass | Sum of the average atomic masses of all the atoms in a compound as represented by the chemical formula and expressed in amu. |  |
| 5 | Mole | A unit used to count atoms by mass in grams. It is based on 12 grams of Carbon-12. In 12 grams of Carbon-12 there are 6.022 x 1023atoms and this quantity of anything is called a mole. |  |
| 6 | Avogadro’s Law | Equal volumes of different gases, at the same temperature and pressure, contain an equal number of particles. |  |
| 7 | Avogadro’s Number | 6.022 x 1023 which is the number of particles in the quantity called a mole. |  |
| 8 | Molar mass | The average atomic mass (as found on the periodic table) ***expressed in grams.*** This is equal to the mass of one mole (6.022 x 1023 atoms or molecules) of that element or compound. |  |

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