**Dougherty Valley HS AP Chemistry**

**S-68**

**Solutions**

**Quick Check #1**

**Name: Date: Period: Seat #:**

Try these problems. If you can DO them, check the box (🗹). If you CANNOT do them, write some notes TO YOURSELF about what you need to study to succeed at these problems.

* **Formulas:** Quickly write the formulas for the following concentration units:

|  |  |  |  |
| --- | --- | --- | --- |
| Molality | Weight Percent | Mole Fraction | Molarity |
|  |  |  |  |

* **Dissecting A Given Concentration:**
The concentration of a NaOH solution is 0.25 m. This translates into 0.25 and 1.0.

0.25 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and 1.0 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The concentration of a HC2H3O2 solution is 5.00% by weight. This translates into 5.00 and 100.

5.00 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and 100 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and 95.0 = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **Change one concentration into another:**
Household vinegar is labeled as 5.00% by weight. It has a density of 1.01 g/mL. Fill in the chart.

|  |  |  |  |
| --- | --- | --- | --- |
|  | mass (grams) | moles (mol) | volume (L) |
| solute |  |  |  |
| solvent |  |  |  |
| solution |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Molality | Mole Fraction | Molarity |
|  |  |  |