

Name _____ Period _____

College Prep Chemistry of the Earth

Assignment 5J – Mol of a Solution - Molarity

20 Points

Define the following gas state of matter terms

Define Solution	Define Molarity

Molarity Equations for Solutions

M = Molarity (mol/L) n = Mol (mol) V = Liters (L)

$$M \text{ (mol/L)} = \frac{n \text{ (mol)}}{V \text{ (L)}} \quad n \text{ (mol)} = M \cdot V \text{ (mol/L} \cdot \text{L)} \quad V \text{ (L)} = \frac{n \text{ (mol)}}{M \text{ (mol/L)}}$$

Solve the following solution concentration problems

$n = 1.94\text{mol}$ $V = 2.48\text{L}$ $M = \underline{\hspace{2cm}} \text{mol/L}$
$M = \underline{\hspace{2cm}}$
$M =$

$n = 0.81\text{mol}$ $V = 0.42\text{L}$ $M = \underline{\hspace{2cm}} \text{mol/L}$
$M = \underline{\hspace{2cm}}$
$M =$

$M = 2.63\text{mol/L}$ $V = 2.48\text{L}$ $n = \underline{\hspace{2cm}} \text{mol}$
$n =$
$n =$

$M = 0.93\text{mol/L}$ $V = 0.37\text{L}$ $n = \underline{\hspace{2cm}} \text{mol}$
$n =$
$n =$

$n = 4.37\text{mol}$ $M = 1.23\text{mol/L}$ $V = \underline{\hspace{2cm}} \text{L}$
$V = \underline{\hspace{2cm}}$
$V =$

$n = 1.74\text{mol}$ $M = 3.28\text{mol/L}$ $V = \underline{\hspace{2cm}} \text{L}$
$V = \underline{\hspace{2cm}}$
$V =$