

Name: \_\_\_\_\_

Period: \_\_\_\_\_

Seat#: \_\_\_\_\_

Write the definition of each term:

1) Solute	2) Solvent	3) Solution

Write the definition of each concentration in terms of solute, solvent, and/or solution:

4) Molarity (M)	5) Molality (m)	6) Mole Fraction ( $\chi$ )	7) Weight Percent (%)

Each of these concentrations involves grams or moles of solute, solvent, or solution. Determine those values based on the information at the top of the chart. In the left hand column write the equation that you will use to solve the problem. In the right column show all your work.

Assume you dissolve 2.56 g of malic acid,  $C_4H_6O_5$ , in half a liter of water (500.0 g).

Equation to be used	Work and answer
8) Molarity of acid in solution	
9) Molality of acid in solution	
10) Mole fraction of acid in solution	
11) Weight percentage of acid in solution	

Dougherty Valley HS Chemistry - AP  
Solutions – Concentration Practice

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Fill in the blanks in the table. Aqueous solutions are assumed. Show all work.

Compound	Molarity	Weight Percent	Mole Fraction
NaI	0.15		
C <sub>2</sub> H <sub>4</sub> OH		5.0	
C <sub>12</sub> H <sub>22</sub> O <sub>11</sub>	0.15		