

## 14 • Solutions

## C O N C E N T R A T I O N

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

molarity (M)	molality (m)	mole fraction (X)	weight percent (%)

Each of these concentrations involves **grams** or **moles** of solute, solvent, or solution. Determine those values. These are problems from your textbook. Check for answers in the back of the book. Do work on another sheet of paper.

10. Assume you dissolve 2.56 g of malic acid,  $C_4H_6O_5$ , in half a liter of water (500.0 g). Calculate the molarity, molality, mole fraction, and weight percentage of acid in the solution.

12. Fill in the blanks in the table. Aqueous solutions are assumed.

Compound	Molality	Weight Percentage	Mole Fraction
NaI	0.15		
$C_2H_5OH$		5.0	
$C_{12}H_{22}O_{11}$	0.15		

Continue with problems 14, 16, 18, 20, 22, 24, and 26 on pages 678 and 679 of your textbook.