Name:
Date:
Period:
Seat \#:
Write the definition of each concentration in terms of solute, solvent, and/or solution:

| Molarity (M) | Molality $(\mathrm{m})$ | Mole fraction $(\chi)$ | Weight percent $(\%)$ |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |

Each of these concentrations involves grams or moles of solute, solvent, or solution. Determine those values.

| Assume you dissolve 2.56 g of malic acid, C 4 H 6 O, in half a liter of water $(500.0 \mathrm{~g})$. |  |
| :--- | :--- |
| Molarity of acid in solution |  |
| Molality of acid in solution |  |
|  |  |
| mole fraction of acid in solution |  |
| weight percentage of acid in solution |  |
|  |  |

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

| Compound | Molarity | Weight Percent | Mole Fraction |
| :--- | :---: | :---: | :---: |
| NaI | 0.15 |  |  |
| $\mathrm{C}_{2} \mathrm{H}_{5} \mathrm{OH}$ |  | 5.0 |  |
| $\mathrm{C}_{12} \mathrm{H}_{22} \mathrm{O}_{11}$ | 0.15 |  |  |

