

Name: _____

BLk: _____ Date: _____

Chemistry 11 Molarity

The following are important definitions to know:

CONCENTRATION:

CONCENTRATED:

DILUTE:

MOLAR CONCENTRATION:

MOLARITY FORMULA:

Example 1. If 5.0 L of solution contains 2.0 moles of Sodium Chloride, what is the molarity of the NaCl?

Please note: the unitary symbols for molarity are mol/L but they can be expressed as:

M, [], or written as "molar"

Example 2. What is the [NaCl] in a solution that contains 5.12 g of NaCl in 250.0 mL of solution?

Example 3. What mass of NaOH is contained in 3.50 L of 0.200 M NaOH?

Example 4. What is the molarity of pure sulphuric acid, H_2SO_4 , having a density of 1.839 g/mL?

Example 5. What is the molarity of Calcium chloride in a solution made by dissolving 15.00 g of $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ in 500.0 mL of water?

Example 6. If the density of pure perchloric acid (HClO_4) is 1.77×10^3 g/L, what is the molarity of the pure HClO_4 ?