Molarity

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1. What mass of sodium hydroxide is contained in 2.5 L of 0.010 M solution?
   A. 0.010 g
   ✓ B. 1.0 g
   C. 0.025 g
   D. 0.40 g

2. You evaporate all the water from 100 mL of sodium chloride solution and obtain 11.3 g of sodium chloride. What was the molarity of the salt solution?
   ✓ A. 3.19 M
   B. 0.319 M
   C. 113 M
   D. 0.113 M

3. A solution of iodine in carbon tetrachloride is used when iodine is used for certain chemical tests. How much iodine must be added to prepare a 0.480 M solution of iodine if 100.0 mL of carbon tetrachloride is used?
   ✓ A. 7.4 g iodine
   B. 12.2 g iodine
   C. 6.1 g iodine
   D. 0.048 g iodine

4. What is the molarity of acetone in a solution composed of 255 g of acetone (pictured) dissolved in 213 mL of water?
   ✓ (CH₃)₂CO
   A. 5.2 M
   B. 20.6 M
   C. 1.20 M
   D. 4.39 M

5. Molarity is expressed in units of
   ✓ moles of solute per liters of solution
   B. liters of solution per mole of solute
   C. moles of solute per liter of solvent
   D. liters of solvent per mole of solute