

CLASS SET!! DO NOT TAKE!! DO NOT WRITE ON!!

Molarity Calculations Part 1

1. If you have 2.0 moles of glucose in 8.0 liters of solution, what is the molarity of this solution?
2. If you have 6.0 moles of glucose in 4.0 liters of solution, what is the molarity of this solution?
3. How many moles of sugar are in a 0.25M solution that is 0.8L in volume?
4. How many moles of salt are in a 0.50 liter 2.0 M solution?
5. How many liters of water need to be added to 5.0 moles of sucrose to make a 0.5M solution?
6. How many liters of water need to be added to 0.75 moles of bleach to make a 0.25M solution?
7. How many moles of vinegar are in a 0.67M solution that is 1.2 L in volume?
8. How many liters of water need to be added to 2.8 moles of nitric acid to prepare a 2.0 M solution?
9. Which solution is more concentrated: 2.0 moles of glucose in 8.0 liters of solution or 6.0 moles of glucose in 4.0 liters of solution? How many times more concentrated is it than the other solution?

Molarity Calculations Part 2

1. How many grams of NaCl does 500. mL of a 0.25 M solution contain?
2. How many grams of sucrose ($C_{12}H_{22}O_{11}$) are dissolved in a 5.00M solution that has a volume of 3.00 L?
3. If 55.0g of NaOH was dissolved in 550. mL of water, what is the molarity?
4. If 25.0g of KCl was dissolved in 100.0 mL of water, what is the molarity?
5. If you have 25 mL of a 0.50M solution of NaCl, how many grams of NaCl is there?
6. If you have 2.0 liters of 0.25M sucrose, how many grams of sucrose were dissolved?
7. You have 2.0 L of a 2.0 M NaCl solution:
 - a. How could you make 0.50L of a 0.75M solution of NaCl?
 - b. How could you make 600.0 mL of 0.75 M solution of NaCl?
 - c. How could you make 100.0 mL of 1.5M solution of NaCl?

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