

1. What is the mass percent of NaCl in a solution created by dissolving 38 grams of NaCl in 345 grams of water?
2. What is the mass percent of KI in a solution that has 125 grams of KI into 350 grams of solution?
3. How many grams of NaBr are in 135 grams of a 12% by mass solution of NaBr?
4. If I obtain 12 grams of NaCl from 150 grams of salt solution, what mass percent of NaCl was the solution?
5. If I obtain 150 grams of KI from a 60% by mass solution, how many grams of solution did I have?
6. What is the mass percent of CaCl_2 if 568 grams of calcium chloride are dissolved 3000 grams of water?
7. What is the mass percent of $\text{Ca}(\text{NO}_3)_2$ if 68 grams of calcium nitrate are dissolved in water to make 450 grams of solution?
8. If I have a 15% ZnCl_2 solution, how many grams of zinc chloride are in 300 grams of solution?
9. If I want to create a 50% by mass solution of NaCl how many grams of salt do I need to create 500 grams of solution?
10. If I dissolve 1 mole of NaCl in 300 grams of water, what is the % by mass of salt in the solution? (careful, this one is tricky!!)

Molarity Calculations

Calculate the molarities of the following solutions:

- 1) 2.3 moles of sodium chloride in 0.45 liters of solution.
- 2) 1.2 moles of calcium carbonate in 1.22 liters of solution.
- 3) 0.09 moles of sodium sulfate in 12 mL of solution.
- 4) 0.75 moles of lithium fluoride in 65 mL of solution.
- 5) 0.8 moles of magnesium acetate in 5 liters of solution.
- 6) 120 grams of calcium nitrite in 240 mL of solution.
- 7) 98 grams of sodium hydroxide in 2.2 liters of solution.
- 8) 1.2 grams of hydrochloric acid in 25 mL of solution.
- 9) 45 grams of ammonia in 0.75 L of solution.