1. A solution contains 12.8 g of MgF_2 in 145 g of H_2O. What is the mass percent (m/m)% of this solution?

8.11%

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2. A soft drink contains 0.035 mL of sodium in 315 mL of H_2O. What is the volume percent (v/v)% of this solution?

0.011%

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3. Ocean water contains 3.50% (m/m) NaCl. How much NaCl can be obtained from 274 g of ocean water?

9.59 g NaCl

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4. A solution is 14.9% (m/m) sucrose. How many grams of solution would be needed to obtain 35.6 g of sucrose?

239 g solution

5. A solution is 25.5% (v/v) $NaNO_3$. How many mL of water would be needed to prepare a solution that contained 18.2 mL of $NaNO_3$?

53.2 mL H_2O

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6. A solution is 3.58% (m/m) KOH. How many grams of KOH are needed to prepare a solution that contains 65.5 g of H_2O?

2.43 g KOH

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7. A solution is 16.8% (m/m) gold (Au). How many atoms of gold are in 125.2 g of the solution?

6.43×10^{22} atoms Au

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8. A solution is 21.8% (m/m) H_2SO_4. If the density of the solution os 1.056 g/mL, what is the molarity of this solution in mol/L?

2.35 mol/L