

Name: _____

Concentration of Solutions Worksheet

Calculate the concentrations of the following solutions using both percent by mass and molarity.
(Assume that the density of water is 1.00 g/mol)

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|----|--|--------------------|
| 1) | 2.3 moles of sodium chloride in 0.45 liters of solution. | |
| | a) <u>Percent by Mass Concentration</u> | b) <u>Molarity</u> |
| | | |
| 2) | 1.2 moles of calcium carbonate in 1.22 liters of solution. | |
| | a) <u>Percent by Mass Concentration</u> | b) <u>Molarity</u> |
| | | |
| 3) | 98 grams of sodium hydroxide in 2.2 liters of solution. | |
| | a) <u>Percent by Mass Concentration</u> | b) <u>Molarity</u> |
| | | |
| 4) | 1.2 grams of hydrochloric acid in 25 mL of solution. | |
| | a) <u>Percent by Mass Concentration</u> | b) <u>Molarity</u> |

Explain how you would make the following solutions. (Follow the example on the website!)

5) 1.5 L of 2.00 M NaOH_(aq)

6) 0.75 L of 0.25 M Na₂SO_{4(aq)}