Molarity

1. For a salt water solution, identify the solute and the solvent.

2. What is meant by the terms, dilute and concentrated?

3. Define the term molarity of a solution. What is the symbol for molarity?

4. A 2.00 g sample of NaOH was dissolved in water to make a volume of 100 mL. What is the molarity of this solution? (0.5M)

5. How many milliliters of 0.250M NaOH are needed to provide 0.200 moles of NaOH? (800mL)

6. How many grams of NaOH are there in 80.0 mL of 0.400M NaOH solution?(1.28 g)

7. How many moles of NaOH are contained in 150 mL of 3.00 M NaOH solution? (0.450 mole)

8. What is the molarity of a solution when 0.135 moles of LiOH are dissolved in water to give 50.0 mL of solution. (2.7M)

9. How many grams of KMnO₄ would you need to prepare 520 mL of 0.58 M solution? (47.7g)

10. How many milliliters of 5.3 M KBr do you need to get 0.112 moles of KBr? (21.1mL)