QUIZIZZ Worksheets

Name

Molality And Molarity (Concentration of Solutions Part 3)

Class

Total questions: 20

Worksheet time: 15mins

Date

Instructor name: Dr Alicia

1. Molality (m) = moles of solute / _____.

kilometer of solvent

. kilogram of solvent

kiloliter of solvent

ounces of solvent

2. How many moles of NaCl are present in a solution with a molarity of 8.59 M and a volume of 125 mL?

62.7 mol.

1.07 mol

0.069 mol

. 1074 mol

3. What are the units of molarity?

ml

ML

m

M

4. What are the units of molality

M

ML

. m

ml

5. Which equation is used to find molarity?

Moles solute/L solution

Moles solute/kg solution

Moles solute/kg solvent

Grams solute/L solution

6. A student is preparing solutions for a laboratory experiment by dissolving solid solutes in liquid solvents. Which action will increase the rate of solubility
Incorrect

increasing the particle size of the solute

stirring the solute in the solution

increasing the pressure on the solution

lowering the temperature of the solvent

7. What is the molality of a solution made by dissolving 2 moles of NaOH in 400 grams of water?

0.3 mol/kg. solvent

2.5 moles /kg solvent

0.4 mol/kg solvent

0.5 mol/kg. solvent

8. What is the molarity in 650. ml of solution containing 63 grams of sodium chloride?

0.54 M

0.86 M

2.4 M

1.7 M

9. What is the molality of a solution made by dissolving 2 moles of NaOH in 400 grams of water?

2.5 moles /kg solvent

3 mol/kg. solvent

5 mol/kg. solvent

4 mol/kg solvent

10. What is the molarity of a 0.5L sample of a solution that contains 60.0 g of sodium hydroxide (NaOH)
Incorrect

6.0M

0.8 M

1.5M

3.0M

11. What is the molality of a solution in which 3.0 moles of NaCl is dissolved in 1.5 Kg of water?

2.0 M

2.0 m

135 m

0.22 m

12. What is a solvent?

The mixing of different substances.

The substance that does the dissolving in a solution.

The process in which neutral molecules lose or gain electrons.

The process in which neutral molecules lose or gain electrons.

13. What do molarity and molality have in common?

Both have "kg solvent" in the denominator

Both have "L solution" in the denominator

Both have "moles solution" in the denominator

Both have "moles solute" in the numerator

14. How do you convert from grams to moles?

Divide by the molar mass

Multiply by Avogadro's number

Multiply by the molar mass

Divide by Avogadro's number

15. Molar mass of NaOH is _____
Correct

40 grams/mol

38 grams/mol

45 grams/mol

50 grams/mol

16. What is the molality of a solution in which 30.0 moles of NaCl is dissolved in 1.5 Kg of water?

2.2 m

20.0m

20.0 M

135 m

17. Molarity is measured in _____.

moles per g.

moles per mm.

mols per L.

. moles per mL.

18. What is the molarity of 8 grams of sodium chloride in 7,600 mL of solution?

0.036m

0.63M

0.036M

0.63m

19. Molality is defined as _____

moles of solute per liter of solution

the moles of solute per kilogram of solvent

mass of solute/ mass of solution

mass of solute/ mass of solvent X 100

20. Which equation is used to find molality?

Moles solute/L solution

Moles solute/kg solvent

Moles solute/kg solution

Grams solute/L solution.