NORTHWEST TERRITORIES CHEMISTRY 11 (MCH--11) · UNIT D · 25 QUESTIONS

Solution Chemistry and Organic Chemistry — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A solution contains 1 mole of solute in 2 litres of solution. Its concentration, in moles per litre, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A solution contains 2 moles of solute in 0.5 litre of solution. Its concentration, in moles per litre, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A solution has concentration 2 moles per litre. The amount of solute in 0.25 litre of it, in moles, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Sodium chloride has molar mass 58.5 g per mole. The mass needed to make 0.5 litre of a 2 mole per litre solution, in grams, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A solution is diluted from 100 mL at 6 moles per litre to a final volume of 600 mL. The final concentration, in moles per litre, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **To make 500 mL of a 0.2 mole per litre solution from a 2 mole per litre stock solution, the volume of stock needed, in mL, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A saturated solution is one that contains**

A no dissolved solute at all

B more solute than water

C the maximum amount of dissolved solute at that temperature

D only solid solute

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8 **An unsaturated solution is one that**

A has solid solute sitting on the bottom

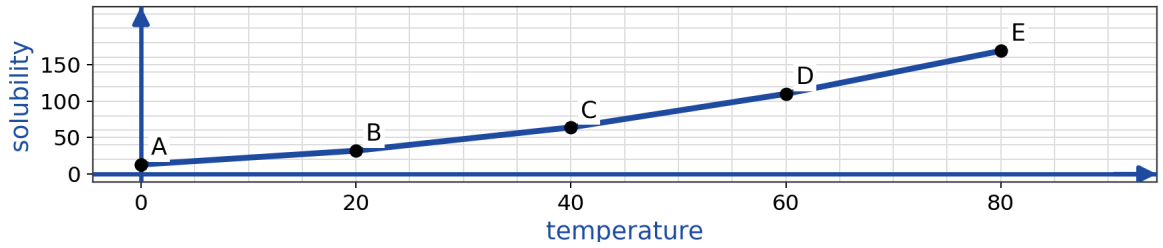
B cannot dissolve any solute

C can still dissolve more solute at that temperature

D contains no solvent

Understand It with Pulse | Flag a mistake

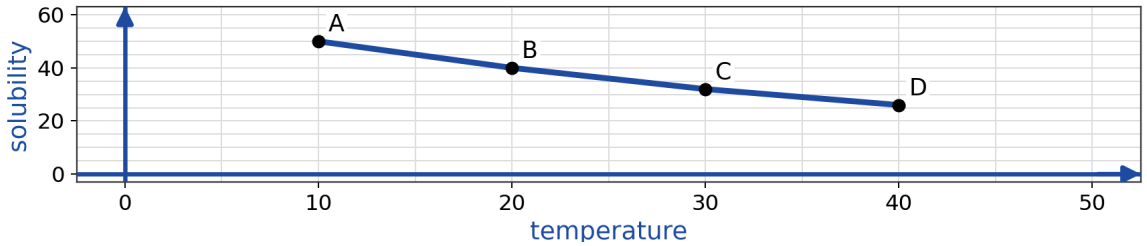
9 **The graph shows the solubility of potassium nitrate in water at different temperatures. The solubility at 60 degrees, in the graph units, is _____**



ANSWER

Understand It with Pulse | Flag a mistake

10 **The graph shows how the solubility of a gas in water changes with temperature. As temperature rises, the solubility of the gas**



A increases

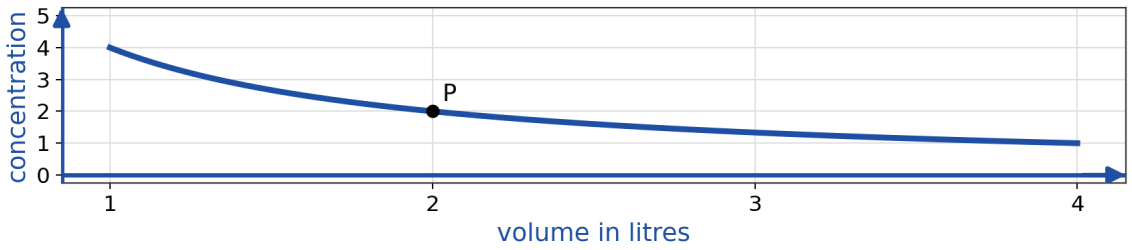
B decreases

C stays the same

D falls to zero at once

Understand It with Pulse | Flag a mistake

11 **The graph shows concentration against volume for a diluted solution. At a volume of 2 litres, the concentration, in moles per litre, is _____**



ANSWER

Understand It with Pulse | Flag a mistake

12 **Methane is a hydrocarbon with formula**

A CH_4

B C_2H_6

C CH_3OH

D CO_2

Understand It with Pulse | Flag a mistake

13 **Propane is a hydrocarbon with formula**

A C_3H_6

B C_2H_4

C C_4H_{10}

D C_3H_8

Understand It with Pulse | Flag a mistake

14 **Alkanes have the general formula**

A C_nH_{2n}

B C_nH_{2n-2}

C C_nH_{2n+2}

D C_nH_n

Understand It with Pulse | Flag a mistake

15 **Ethene, C_2H_4, is an example of an**

A alkane

B alkene

C alkyne

D alcohol

Understand It with Pulse | Flag a mistake

16 **An organic compound containing the hydroxyl group, OH, is an**

A alkane

B alkene

C alcohol

D alkyne

Understand It with Pulse | Flag a mistake

17 **An organic compound containing the carboxyl group, COOH, is a**

A ketone

B alkane

C ester

D carboxylic acid

Understand It with Pulse | Flag a mistake

18 **A two carbon alcohol with a hydroxyl group is named**

A methanol

B ethanol

C ethane

D ethene

Understand It with Pulse | Flag a mistake

19 **A three carbon alkane is named**

A propane

B propene

C butane

D pentane

Understand It with Pulse | Flag a mistake

20 **A four carbon alkane is named**

A methane

B ethane

C butane

D propane

Understand It with Pulse | Flag a mistake

21 **In the lab, eye protection should be worn**

- A only when glass is broken
- B whenever chemicals are handled
- C only at the end of the lab
- D only when water is used

Understand It with Pulse | Flag a mistake

22 **When diluting a concentrated acid, the safe practice is**

- A to add water to acid quickly
- B to add acid to water, slowly and with stirring
- C to pour acid down the sink
- D to heat the acid first

Understand It with Pulse | Flag a mistake

23 **After a beaker breaks in the lab, where should the pieces go?**

- A the regular garbage bin
- B a container for broken glass
- C the sink
- D a chemical waste bottle

Understand It with Pulse | Flag a mistake

24 **Chemicals in the lab should never be**

- A labelled before use
- B tasted to identify them
- C stored in closed containers
- D measured with clean equipment

Understand It with Pulse | Flag a mistake

25 **A hydrocarbon is a compound made only of**

A carbon and oxygen

B carbon and hydrogen

C hydrogen and oxygen

D carbon and nitrogen

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	0.5	**10.**	B	**19.**	A
2.	4	**11.**	2	**20.**	C
3.	0.5	**12.**	A	**21.**	B
4.	58.5	**13.**	D	**22.**	B
5.	1	**14.**	C	**23.**	B
6.	50	**15.**	B	**24.**	B
7.	C	**16.**	C	**25.**	B
8.	C	**17.**	D		
9.	110	**18.**	B		

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