MANITOBA CHEMISTRY 40S · UNIT D · 25 QUESTIONS

Solubility Equilibrium — 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 has hydrogen ion concentration $10^{-}7$ moles per litre . Its pH is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The number of atoms in one molecule of O_2 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A sample of hydrogen has amount 4 moles and molar mass 2 grams per mole. Its mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A sample of water has mass 108 grams. Its molar mass is 18 grams per mole. The amount, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **An amount of 2 moles of carbon dioxide has molar mass 44 grams per mole. Its mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A solution has 6 moles of solute in 3 litres. Its concentration, in moles per litre, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A solution has hydrogen ion concentration $10^{-}5$ moles per litre . Its pH is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A sample of methane has amount 6 moles and molar mass 16 grams per mole. Its mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A sample of ammonia has amount 4 moles and molar mass 17 grams per mole. Its mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A sample of carbon dioxide has mass 88 grams. Its molar mass is 44 grams per mole. The amount, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **An amount of 5 moles of oxygen has molar mass 32 grams per mole. Its mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **A solution has 4 moles of solute in 2 litres. Its concentration, in moles per litre, is**

ANSWER

Understand It with Pulse | Flag a mistake

13 **A solution has hydrogen ion concentration $10^{-}3$ moles per litre . Its pH is**

ANSWER

Understand It with Pulse | Flag a mistake

14 **A sample of nitrogen has amount 5 moles and molar mass 28 grams per mole. Its mass, in grams, is**

ANSWER

Understand It with Pulse | Flag a mistake

15 **A sample of water has amount 3 moles and molar mass 18 grams per mole. Its mass, in grams, is**

ANSWER

Understand It with Pulse | Flag a mistake

16 **The maintenance of a stable internal environment is**

A photosynthesis

B fermentation

C osmosis

D homeostasis

Understand It with Pulse | Flag a mistake

17 **The movement of water across a partially permeable membrane is**

A osmosis

B diffusion

C active transport

D photosynthesis

Understand It with Pulse | Flag a mistake

18 **The organ that pumps blood around the body is the**

A liver

B heart

C lung

D kidney

Understand It with Pulse | Flag a mistake

19 **The organ where oxygen enters the blood is the**

A heart

B liver

C lung

D stomach

Understand It with Pulse | Flag a mistake

20 **The chemical symbol for water is**

- A CO_2
- B O_2
- C NaCl
- D H_2O

Understand It with Pulse | Flag a mistake

21 **The chemical symbol for carbon dioxide is**

- A CO_2
- B H_2O
- C O_2
- D CO

Understand It with Pulse | Flag a mistake

22 **The gas plants absorb from the air for photosynthesis is**

A oxygen

B carbon dioxide

C nitrogen

D hydrogen

Understand It with Pulse | Flag a mistake

23 **The gas released by plants during photosynthesis is**

A carbon dioxide

B nitrogen

C oxygen

D hydrogen

Understand It with Pulse | Flag a mistake

24 **An acid has a pH that is**

A equal to 7

B greater than 7

C equal to 14

D less than 7

Understand It with Pulse | Flag a mistake

25 **A neutral solution has a pH of**

A 7

B 0

C 14

D 1

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	7	**10.**	2	**19.**	C
2.	2	**11.**	160	**20.**	D
3.	8	**12.**	2	**21.**	A
4.	6	**13.**	3	**22.**	B
5.	88	**14.**	140	**23.**	C
6.	2	**15.**	54	**24.**	D
7.	5	**16.**	D	**25.**	A
8.	96	**17.**	A		
9.	68	**18.**	B		

© 2026 Brett Robbins. All Rights Reserved.