ONTARIO CHEMISTRY, GRADE 11, UNIVERSITY PREPARATION (SCH3U) · UNIT C · 25 QUESTIONS

Quantities in Chemical Reactions — 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 **One mole of any substance contains about**

- **A** 6.02×10^{23} particles
- **B** 6.02×10^{22} particles
- **C** 1 particle
- **D** 1000 particles

Understand It with Pulse | Flag a mistake

2 **The molar mass of water, H_2O, is about**

A 10 grams per mole

B 18 grams per mole

C 16 grams per mole

D 20 grams per mole

Understand It with Pulse | Flag a mistake

3 **The molar mass of carbon dioxide, CO_2, is about**

A 28 grams per mole

B 32 grams per mole

C 44 grams per mole

D 12 grams per mole

Understand It with Pulse | Flag a mistake

4 **The molar mass of sodium chloride, NaCl, is about**

A 35.5 grams per mole

B 23 grams per mole

C 81.5 grams per mole

D 58.5 grams per mole

Understand It with Pulse | Flag a mistake

5 **What is the amount in moles in 36 grams of a substance with molar mass 18 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **What is the amount in moles in 88 grams of a substance with molar mass 44 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **What is the amount in moles in 117 grams of a substance with molar mass 58.5 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **What is the amount in moles in 20 grams of a substance with molar mass 40 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **What is the amount in moles in 90 grams of a substance with molar mass 18 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **What is the mass in grams of 2 moles of a substance with molar mass 18 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **What is the mass in grams of 3 moles of a substance with molar mass 44 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **What is the mass in grams of 2 moles of a substance with molar mass 58.5 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **What is the mass in grams of 4 moles of a substance with molar mass 40 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **What is the mass in grams of 0.5 moles of a substance with molar mass 18 grams per mole?**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The amount in moles equals**

A mass ÷ molar mass

B mass × molar mass

C molar mass ÷ mass

D mass + molar mass

Understand It with Pulse | Flag a mistake

16 **In the reaction 2 H_2 plus O_2 gives 2 H_2O, how many moles of water form from 2 moles of hydrogen, with excess oxygen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **In the reaction 2 H_2 plus O_2 gives 2 H_2O, how many moles of water form from 4 moles of hydrogen, with excess oxygen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **In the reaction 2 H_2 plus O_2 gives 2 H_2O, how many moles of water form from 6 moles of hydrogen, with excess oxygen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **In the reaction 2 H_2 plus O_2 gives 2 H_2O, how many moles of water form from 1 moles of oxygen, with excess hydrogen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **In the reaction 2 H_2 plus O_2 gives 2 H_2O, how many moles of water form from 2 moles of oxygen, with excess hydrogen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **In the reaction 2 H_2 plus O_2 gives 2 H_2O, how many moles of water form from 3 moles of oxygen, with excess hydrogen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **In the reaction N_2 plus 3 H_2 gives 2 NH_3, how many moles of ammonia form from 1 moles of nitrogen, with excess hydrogen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **In the reaction N_2 plus 3 H_2 gives 2 NH_3, how many moles of ammonia form from 2 moles of nitrogen, with excess hydrogen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **In the reaction N_2 plus 3 H_2 gives 2 NH_3, how many moles of ammonia form from 4 moles of nitrogen, with excess hydrogen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **In the reaction 2 Mg plus O_2 gives 2 MgO, how many moles of magnesium oxide form from 2 moles of magnesium, with excess oxygen?**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	A	**10.**	36	**19.**	2
2.	B	**11.**	132	**20.**	4
3.	C	**12.**	117	**21.**	6
4.	D	**13.**	160	**22.**	2
5.	2	**14.**	9	**23.**	4
6.	2	**15.**	A	**24.**	8
7.	2	**16.**	2	**25.**	2
8.	0.5	**17.**	4		
9.	5	**18.**	6		

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