CHEMISTRY 2202 · NEWFOUNDLAND AND LABRADOR

Chemistry 2202

Practice Test

Unit A: Stoichiometry

25 Questions

Original practice test based on the Newfoundland and Labrador curriculum. Work through each question, then check your answers at the end.

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.

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Question 1

The molar mass of water, H_2O in grams per mole, is

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Question 2

The molar mass of *methane*, CH_4 in grams per mole, is

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Question 3

The amount, in moles, in 32 g of a substance with molar mass 16 g per mole is

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Question 4

The mass, in grams, of 5 mol of a substance with molar mass 32 g per mole is

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Question 5

Consider the meaning of the term. One mole of any substance contains about

A) 6.02×10^{23} particles

B) 6.02×10^{22} particles

C) 6.02×10^{24} particles

D) 6.02×10^{20} particles

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Question 6

In the reaction $2H_2 + O_2 \rightarrow 2H_2O$ the moles of

oxygen needed to react with 6 mol of hydrogen is

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Question 7

The percent by mass of hydrogen in water, H_2O, to one decimal place, is

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Question 8

For a 1 to 1 reaction, if 3 mol of A reacts with 8 mol of B, the maximum moles of product formed is

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Question 9

At standard temperature and pressure, the volume, in litres, of 2 mol of an ideal gas, using 22.4 L per mole, is

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Question 10

Use what the term means. In the balanced equation H_2 plus Cl_2 forms HCl, the coefficient of HCl is

A) 1

B) 2

C) 3

D) 4

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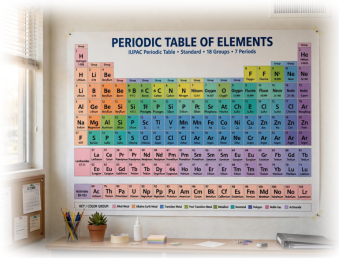

Question 11

Think about the rule. An empirical formula gives

A) the exact number of atoms in a molecule

B) the molar mass

C) the simplest whole number ratio of atoms

D) the percent composition only

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Question 12

In $2H_2 + O_2 \rightarrow 2H_2O$ the mass, in grams, of

water formed from 1 mol of oxygen is

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Question 13

A solution contains 2 mol of solute in 4 L. Its concentration, in moles per litre, is

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Question 14

A reaction has theoretical yield 50 g and actual yield 45 g. The percent yield is

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Question 15

Review the rule. The molar mass of water, H_2O in grams per mole, is

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Question 16

The molar mass of *oxygen gas*, O_2 in grams per mole, is

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Question 17

The amount, in moles, in 36 g of a substance with molar mass 18 g per mole is

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Question 18

The mass, in grams, of 2 mol of a substance with molar mass 44 g per mole is

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Question 19

Consider the concept in general. One mole of any substance contains about

A) 6.02×10^{22} particles

B) 6.02×10^{24} particles

C) 6.02×10^{23} particles

D) 6.02×10^{20} particles

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Question 20

In the reaction $2H_2 + O_2 \rightarrow 2H_2O$ the moles of

oxygen needed to react with 8 mol of hydrogen is

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Question 21

Think about the principle. The percent by mass of hydrogen in water, H_2O, to one decimal place, is

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Question 22

For a 1 to 1 reaction, if 4 mol of A reacts with 6 mol of B, the maximum moles of product formed is

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Question 23

At standard temperature and pressure, the volume, in litres, of 1 mol of an ideal gas, using 22.4 L per mole, is

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Question 24

Consider the principle in general. In the balanced equation H_2 plus Cl_2 forms HCl, the coefficient of HCl is

A) 1

B) 3

C) 4

D) 2

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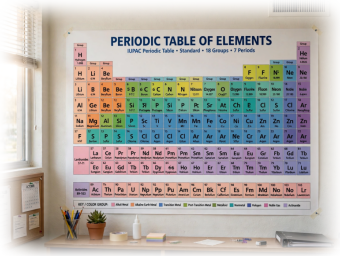

Question 25

Review the principle. An empirical formula gives

A) the simplest whole number ratio of atoms

B) the exact number of atoms in a molecule

C) the molar mass

D) the percent composition only

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ANSWER KEY

1. 18
2. 16
3. 2
4. 160
5. A
6. 3
7. 11.1
8. 3
9. 44.8
10. B
11. C
12. 36
13. 0.50
14. 90
15. 18
16. 32
17. 2
18. 88
19. C
20. 4
21. 11.1
22. 4
23. 22.4
24. D
25. A

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