NOVA SCOTIA CHEMISTRY 11 · UNIT A

Stoichiometry — Practice Test

Nova Scotia Chemistry 11 • 25 questions

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 balanced equation shows 2 moles of reactant making 3 moles of product. Starting with 4 moles of reactant, the product made, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A sample has mass 20 grams and molar mass 10 grams per mole. The amount, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A sample has 2 moles and molar mass 18 grams per mole. The mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A reaction has theoretical yield 80 grams and actual yield 60 grams. The percent yield is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A balanced chemical equation must have equal numbers of each**

A molecule on both sides

B gram on both sides

C atom on both sides

D litre on both sides

Understand It with Pulse | Flag a mistake

6 **A compound has total mass 100 grams and one element contributes 40 grams. The percent of that element is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A gas sample has 2 moles at STP. Its volume, in litres, is about**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A hydrated compound formula includes water molecules shown after a**

A plus sign only

B comma

C bracket only

D dot

Understand It with Pulse | Flag a mistake

9 **A mole of carbon atoms has a mass of about**

- A 1 gram
- B 6 grams
- C 12 grams
- D 100 grams

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10 **A molecular formula shows the**

- A simplest ratio only
- B mass of one mole only
- C actual number of atoms in a molecule
- D state of matter

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11 **An empirical formula shows the**

- **A** actual number of atoms always
- **B** simplest whole number ratio of atoms
- **C** mass in grams
- **D** charge of ions

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12 **At STP, one mole of an ideal gas occupies about**

- **A** 1 litre
- **B** 22.4 litres
- **C** 10 litres
- **D** 100 litres

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13 **Avogadro number is named for a scientist who studied**

A acids only

B metals only

C gases and particles

D light only

Understand It with Pulse | Flag a mistake

14 **Concentration can be expressed in moles per**

A litre

B gram

C metre

D second

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15 **Excess reactant is the reactant that**

A runs out first

B remains after reaction ends

C is a gas only

D never mixes

Understand It with Pulse | Flag a mistake

16 **Molar mass is the mass of**

A one atom only

B one mole of a substance

C one litre of gas

D one molecule only

Understand It with Pulse | Flag a mistake

17 **Molar mass units are**

- A moles per gram
- B litres per mole
- C grams per litre only
- D grams per mole

Understand It with Pulse | Flag a mistake

18 **One mole of any substance contains about**

- A 6.02×10^{23} particles
- B 100 particles
- C 1000 particles
- D 1 particle

Understand It with Pulse | Flag a mistake

19 **A balanced equation shows 4 moles of reactant making 1 moles of product. Starting with 8 moles of reactant, the product made, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A sample has mass 36 grams and molar mass 18 grams per mole. The amount, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A sample has 3 moles and molar mass 40 grams per mole. The mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A reaction has theoretical yield 50 grams and actual yield 40 grams. The percent yield is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A balanced equation shows 3 moles of reactant making 2 moles of product. Starting with 6 moles of reactant, the product made, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A sample has mass 44 grams and molar mass 22 grams per mole. The amount, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A sample has 4 moles and molar mass 17 grams per mole. The mass, in grams, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	6	**10.**	C	**19.**	2
2.	2	**11.**	B	**20.**	2
3.	36	**12.**	B	**21.**	120
4.	75	**13.**	C	**22.**	80
5.	C	**14.**	A	**23.**	4
6.	40	**15.**	B	**24.**	2
7.	44.8	**16.**	B	**25.**	68
8.	D	**17.**	D		
9.	C	**18.**	A		

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