NEW BRUNSWICK CHEMISTRY 111-112 · UNIT E · 10 QUESTIONS

Stoichiometric Calculations, Limiting Reagents, and Gas Laws — 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 **To find the limiting reagent, compare the**

- **A** masses only, weighing each reactant without working out the moles at all
- **B** volumes only
- **C** moles available to moles required
- **D** colours

Understand It with Pulse | Flag a mistake

2 **Gay Lussac law relates gas pressure to absolute temperature at constant**

A pressure

B mass

C moles

D volume

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3 **Increasing the pressure on a gas at constant temperature**

A decreases its volume

B increases its volume

C does not change its volume

D changes its mass

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4 **A reaction needs 3 moles of hydrogen for every 1 mole of nitrogen. With 9 moles of hydrogen, the moles of nitrogen needed are**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A gas at 100 kilopascals occupies 8 litres. At constant temperature its volume is changed to 4 litres. Its new pressure, in kilopascals, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A gas occupies 500 millilitres at 500 kelvin. At constant pressure its temperature is changed to 1000 kelvin. Its new volume, in millilitres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A gas occupies 600 millilitres at 300 kelvin. At constant pressure its temperature is changed to 600 kelvin. Its new volume, in millilitres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A gas at pressure 250 kilopascals occupies 2 litres. At constant temperature its pressure is changed to 500 kilopascals. Its new volume, in litres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A gas at pressure 120 kilopascals occupies 10 litres. At constant temperature its pressure is changed to 240 kilopascals. Its new volume, in litres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **At standard temperature and pressure one mole of gas occupies 22.4 litres. A sample occupying 89.6 litres at standard temperature and pressure contains, in moles**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. D
3. A
4. 3
5. 200
6. 1000
7. 1200
8. 1
9. 5
10. 4

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