QUEBEC CHEMISTRY, SECONDARY V · UNIT A

Gases — Practice Test

Quebec Chemistry, Secondary V • 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 gas at pressure 100 kilopascals occupies 6 litres. At constant temperature its pressure is changed to 200 kilopascals. Its new volume, in litres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A gas at pressure 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

3 **A gas occupies 300 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

4 **At standard temperature and pressure one mole of gas occupies 22.4 litres. A sample occupies 44.8 litres at standard temperature and pressure. Its amount, in moles, is**

ANSWER

Understand It with Pulse | Flag a mistake

5 **A gas at pressure 100 kilopascals is at 300 kelvin. At constant volume its temperature is changed to 600 kelvin. Its new pressure, in kilopascals, is**

ANSWER

Understand It with Pulse | Flag a mistake

6 **A gas at 300 kelvin is heated to 600 kelvin at constant volume. The pressure change factor is**

ANSWER

Understand It with Pulse | Flag a mistake

7 **A gas mixture has partial pressures of 30 kilopascals, 50 kilopascals and 20 kilopascals. Its total pressure, in kilopascals, is**

ANSWER

Understand It with Pulse | Flag a mistake

8 **A gas mixture has total pressure 200 kilopascals and one gas has partial pressure 80 kilopascals. The partial pressure of the remaining gas, in kilopascals, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A gas mixture has total pressure 300 kilopascals. Two gases contribute 120 kilopascals and 100 kilopascals. The third gas contributes, in kilopascals**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A gas that can be compressed easily has particles with large spaces**

A between them

B inside them

C around them only

D below them

Understand It with Pulse | Flag a mistake

11 **According to kinetic molecular theory gas particles move in**

A fixed circles

B perfect squares

C random straight line motion

D standing waves

Understand It with Pulse | Flag a mistake

12 **An ideal gas is a model in which particles have negligible volume and no**

A attractive forces

B motion

C mass

D speed

Understand It with Pulse | Flag a mistake

13 **Avogadro hypothesis states that equal volumes of gases at the same temperature and pressure contain equal numbers of**

A colours

B masses

C particles

D charges

Understand It with Pulse | Flag a mistake

14 **Boyle law states that at constant temperature the pressure of a fixed amount of gas varies inversely with its**

A volume

B temperature

C mass

D colour

Understand It with Pulse | Flag a mistake

15 **Charles law states that at constant pressure the volume of a gas varies directly with its absolute**

A mass

B temperature

C pressure

D colour

Understand It with Pulse | Flag a mistake

16 **Compressing a gas into a smaller volume at constant temperature increases its**

A temperature only

B mass

C volume

D pressure

Understand It with Pulse | Flag a mistake

17 **A gas at pressure 120 kilopascals occupies 5 litres. At constant temperature its pressure is changed to 300 kilopascals. Its new volume, in litres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A gas at pressure 90 kilopascals occupies 6 litres. At constant temperature its volume is changed to 3 litres. Its new pressure, in kilopascals, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A gas occupies 200 millilitres at 200 kelvin. At constant pressure its temperature is changed to 400 kelvin. Its new volume, in millilitres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **At standard temperature and pressure one mole of gas occupies 22.4 litres. A sample occupies 67.2 litres at standard temperature and pressure. Its amount, in moles, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A gas at pressure 120 kilopascals is at 200 kelvin. At constant volume its temperature is changed to 400 kelvin. Its new pressure, in kilopascals, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A gas at pressure 80 kilopascals occupies 9 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

23 **A gas at pressure 200 kilopascals occupies 3 litres. At constant temperature its volume is changed to 6 litres. Its new pressure, in kilopascals, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A gas occupies 150 millilitres at 300 kelvin. At constant pressure its temperature is changed to 900 kelvin. Its new volume, in millilitres, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **At standard temperature and pressure one mole of gas occupies 22.4 litres. A sample occupies 112.0 litres at standard temperature and pressure. Its amount, in moles, is**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	3	**10.**	A	**19.**	400
2.	200	**11.**	C	**20.**	3
3.	600	**12.**	A	**21.**	240
4.	2	**13.**	C	**22.**	3
5.	200	**14.**	A	**23.**	100
6.	2	**15.**	B	**24.**	450
7.	100	**16.**	D	**25.**	5
8.	120	**17.**	2		
9.	80	**18.**	180		

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