

Brett Robbins Academic Consulting

Chemistry 20 Practice Test

Unit B: Forms of Matter · Gases

5 Questions

Original practice questions written to the Alberta curriculum, in the style of past diploma examinations. Work through each question, then check your answers with the key at the end.

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, contact Brett for clarification.

Question 1

A temperature of 25°C is equivalent to

- A) 248 K
- B) 273 K
- C) 298 K
- D) 323 K

Question 2

A gas pressure of 303.9 kPa is equivalent to

Use $1.00\text{ atm} = 101.325\text{ kPa}$.

- A) 0.333 atm
- B) 3.00 atm
- C) 30.0 atm
- D) 0.0300 atm

Question 3

A sample of gas in a cylinder with a movable piston is compressed from 4.0 L to 2.0 L at constant temperature.

- A) The pressure doubles
- B) The pressure is halved
- C) The pressure does not change
- D) The pressure increases by a factor of four

Question 4

Which statement is consistent with the kinetic molecular theory of gases?

- A) Gas particles occupy most of the volume of their container
- B) Gas particles attract each other with strong forces
- C) Gas particles are in constant random motion and collide elastically
- D) Gas particles stop moving at 0°C

Question 5

A gas sample is cooled to a temperature of -23°C .

Its temperature, in kelvin, is ____

Answer Key

- | | | |
|------|------|--------|
| 1. C | 3. A | 5. 250 |
| 2. B | 4. C | |

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