ARIZONA CHEMISTRY · UNIT 4 · 10 QUESTIONS

Gases, Thermodynamics, and Equilibrium — 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 **A gas occupies 4 L. If its temperature in kelvin doubles at constant pressure, its volume, in liters, is ____**



ANSWER

Understand It with Pulse | Flag a mistake

2

An enthalpy change that is positive means the reaction is

A Catalyzed

B Endothermic

C Exothermic

D At equilibrium

Understand It with Pulse

Flag a mistake

3 **A gas mixture has total pressure 200 kPa. If the mole fraction of oxygen is 0.2, its partial pressure, in kilopascals, is ____**



ANSWER _____

Understand It with Pulse | Flag a mistake

4 **If pressure is increased on a gas equilibrium, the reaction shifts toward**

A Neither side

B The solid side

C The side with fewer moles of gas

D The side with more moles of gas

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5 **A sample of water has mass 50 g, specific heat 4.18, and temperature rise 5 degrees Celsius. The heat absorbed, in joules, is ____**

ANSWER _____

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6 **A large equilibrium constant means that at equilibrium**

- A Reactants are favoured
- B No reaction occurs
- C The reaction is slow
- D Products are favoured

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7 **At standard temperature and pressure, the volume, in liters, of 0.25 mol of gas is ____**

ANSWER _____

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8 **Which gas diffuses fastest at the same temperature**

- **A** H_2
- **B** O_2
- **C** CO_2
- **D** Cl_2

Understand It with Pulse | Flag a mistake

9 **A gas has pressure 200 kPa at 400 K. At constant volume and 200 K, its pressure, in kilopascals, is ____**

ANSWER _____

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10 **In an energy diagram, an endothermic reaction has products that are**

- **A** Higher than the reactants
- **B** Lower than the reactants
- **C** Equal to the reactants
- **D** At zero

Understand It with Pulse **Flag a mistake**

ANSWER KEY

1. 8
2. B
3. 40
4. C
5. 1045
6. D
7. 5.6
8. A
9. 100
10. A

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