ALASKA 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 so it can be fixed.

1 **The heat, in joules, absorbed by 100 g of water warmed by 10 K, using specific heat capacity 4.19 J per gram per kelvin, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **Removing product from a system at equilibrium shifts it toward the**

A. reactants

B. catalyst

C. starting point only

D. products

Understand It with Pulse | Flag a mistake

3 **For the reaction 2A ⇌ B,**
with [B] = 8 and [A] = 2 in moles per liter, the equilibrium constant is _____

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **A catalyst speeds a reaction by**

A lowering the activation energy

B raising the activation energy

C changing the products

D removing the reactants

Understand It with Pulse | Flag a mistake

5 **A gas at 2 atm occupies 3 L at 300 K. At 1 atm and 600 K, its volume, in liters, is _____**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **Entropy of a gas is generally**

A less than that of a liquid

B zero

C greater than that of a liquid

D equal to that of a solid

Understand It with Pulse | Flag a mistake

7 **A gas at 200 kPa and 400 K is cooled to 200 K at constant volume. Its new pressure, in kilopascals, is ____**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **At equilibrium, the concentrations of reactants and products**

A are equal

B stay constant

C are both zero

D keep changing

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9 **A reaction releases a total of 100 kJ from 2 mol of reactant. The heat released per mole, in kilojoules, is ____**

ANSWER _____

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10 **Increasing temperature shifts an exothermic equilibrium toward the**

A products

B catalyst

C starting point only

D reactants

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ANSWER KEY

1.	4190	**5.**	12	**9.**	50
2.	D	**6.**	C	**10.**	D
3.	2	**7.**	100		
4.	A	**8.**	B		

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