ONTARIO CHEMISTRY, GRADE 12, UNIVERSITY PREPARATION (SCH4U) · UNIT C · 10 QUESTIONS

Energy Changes and Rates of Reaction — 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 **If delta H for a reaction is -200 kilojoules per mole, the reaction is**

- A Non spontaneous always
- B Endothermic
- C Exothermic
- D At equilibrium

Understand It with Pulse | Flag a mistake

2 **Entropy increases when a solid melts because particles become**

A More ordered

B More disordered

C Closer together

D Colder

Understand It with Pulse | Flag a mistake

3 **A reaction is spontaneous at all temperatures if delta H is negative and delta S is**

A Positive

B Unknown

C Zero

D Negative

Understand It with Pulse | Flag a mistake

4 **The Gibbs free energy change is negative for a reaction that is**

A Spontaneous

B At equilibrium only

C Non spontaneous

D Endothermic always

Understand It with Pulse | Flag a mistake

5 **For the reaction with delta H -100 and T delta S equal to 30, delta G is**



A +130

B -130

C +70

D -70

Understand It with Pulse | Flag a mistake

6 **A calorimeter constant accounts for heat absorbed by the**

- A Air only
- B Calorimeter itself
- C Water only
- D Reactants only

Understand It with Pulse | Flag a mistake

7 **Heating 200 grams of water by 5 degrees Celsius with specific heat capacity 4.19 joules per gram degree Celsius absorbs, in joules,**



ANSWER

Understand It with Pulse | Flag a mistake

8 **The order of a reaction is determined by**

A Experiment

B Balanced equation coefficients only

C Catalyst choice

D Temperature only

Understand It with Pulse | Flag a mistake

9 **If rate doubles when concentration doubles and quadruples when concentration quadruples, the order is**

A Second

B Third

C First

D Zero

Understand It with Pulse | Flag a mistake

10 **A reaction profile with products lower than reactants shows a reaction that is**

A Endothermic

B Neutral

C Exothermic

D Reversible only

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. B
3. A
4. A
5. B
6. B
7. 4190
8. A
9. C
10. C

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