NOVA SCOTIA ADVANCED CHEMISTRY 12 · UNIT A

Thermochemical Changes — Practice Test

Nova Scotia Advanced Chemistry 12 • 10 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 **Three steps have enthalpy changes of 200, -300 and -100 kilojoules per mole. The overall enthalpy change, in kilojoules per mole, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **4 kilograms of water absorb 168 kilojoules. Using 4.2 kilojoules per kilogram per degree Celsius, the temperature rise, in degrees Celsius, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **2 kilograms of water absorb 126 kilojoules. Using 4.2 kilojoules per kilogram per degree Celsius, the temperature rise, in degrees Celsius, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **168 kilojoules warm water by 20 degrees Celsius. Using 4.2 kilojoules per kilogram per degree Celsius, the mass of water, in kilograms, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **252 kilojoules warm water by 20 degrees Celsius. Using 4.2 kilojoules per kilogram per degree Celsius, the mass of water, in kilograms, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **Breaking bonds needs 800 kilojoules and forming bonds releases 1200 kilojoules. The enthalpy change, in kilojoules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Breaking bonds needs 300 kilojoules and forming bonds releases 500 kilojoules. The enthalpy change, in kilojoules, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The enthalpy change of neutralisation of a strong acid and strong base is about**

A -57 kilojoules per mole

B +57 kilojoules per mole

C zero

D -200 kilojoules per mole

Understand It with Pulse | Flag a mistake

9 **An energy cycle can be used to find an enthalpy change that**

A is always zero

B cannot be measured directly

C needs no data

D is for one step only

Understand It with Pulse | Flag a mistake

10 **When a fuel burns in excess oxygen the products are**

A carbon monoxide only

B hydrogen only

C carbon dioxide and water

D oxygen only

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	-200	**5.**	3	**9.**	B
2.	10	**6.**	-400	**10.**	C
3.	15	**7.**	-200		
4.	2	**8.**	A		

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