PRINCE EDWARD ISLAND CHEMISTRY 12 · UNIT A

Thermochemistry — Practice Test

Prince Edward Island 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 **A spontaneous process at constant temperature and pressure has a negative change in**

- A enthalpy only
- B entropy only
- C activation energy
- D Gibbs free energy

Understand It with Pulse | Flag a mistake

2 **Calorimetry measures heat change using the**

A pressure change only

B volume change only

C temperature change of a known mass

D colour change

Understand It with Pulse | Flag a mistake

3 **The specific heat capacity is heat per unit mass per**

A litre

B degree of temperature change

C mole only

D second

Understand It with Pulse | Flag a mistake

4 **Heating 150 grams of water by 10 degrees Celsius with a specific heat capacity of 4 joules per gram per degree Celsius absorbs this many joules**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A sample absorbs 3000 joules and its temperature rises by 15 degrees Celsius. Its heat capacity in joules per degree Celsius is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **Combustion of 4 moles of a fuel releases 500 kilojoules per mole. The total heat released in kilojoules is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Heating 200 grams of water by 15 degrees Celsius with a specific heat capacity of 4 joules per gram per degree Celsius absorbs this many joules**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A reaction releases 600 kilojoules for 2 moles. The heat released per mole in kilojoules is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **Step enthalpies of -200 and -100 kilojoules sum to this many kilojoules**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A sample absorbs 4000 joules and its temperature rises by 20 degrees Celsius. Its heat capacity in joules per degree Celsius is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	D	**5.**	200	**9.**	-300
2.	C	**6.**	2000	**10.**	200
3.	B	**7.**	12000		
4.	6000	**8.**	300		

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