NOVA SCOTIA ADVANCED CHEMISTRY 12 · UNIT A · 5 QUESTIONS

Thermochemical Changes — Practice Test

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1 **Clear glass of water on a plain white surface. 400 millilitres of water, density 1 gram per millilitre, are heated by 5 degrees Celsius. Using 4.2 joules per gram per degree Celsius, the heat absorbed, in joules, is**



ANSWER

Understand It with Pulse | Flag a mistake

2 **120 millilitres of water, density 1 gram per millilitre, are heated by 10 degrees Celsius. Using 4.2 joules per gram per degree Celsius, the heat absorbed, in joules, is**

ANSWER

Understand It with Pulse | Flag a mistake

3 **16 grams of methane, molar mass 16 grams per mole, release 960 kilojoules on burning. The molar enthalpy of combustion, in kilojoules per mole, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **48 grams of methane, molar mass 16 grams per mole, release 2700 kilojoules on burning. The molar enthalpy of combustion, in kilojoules per mole, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Three steps have enthalpy changes of -150, -150 and -100 kilojoules per mole. The overall enthalpy change, in kilojoules per mole, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 8400
2. 5040
3. -960
4. -900
5. -400

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