	1	2	3	4	5	6
1	kJ mol ⁻¹	calorimetry	Hess's Law	Q = mc∆T	Mean bond enthalpy	$C_2H_5OH_{(I)} + 3O_{2(g)} \rightarrow 2CO_2$ $(g) + 3H_2O(I)$
2	Total enthalpy change for a reaction is independent of route taken	$\Delta \mathcal{H}$	$\Delta\mathcal{H}_{\!f}$	Reactants Products C Intermediate	ΔH is negative	thermometer draught shield insulating card water
3	standard conditions	temperature plastic lid plastic lid	$\Sigma H_{\text{total}} = \Sigma H_{\text{reactants}} - \Sigma H_{\text{products}}$		Heat energy transferred in a reaction at constant pressure	clamped copper calorimete burner
4	bond enthalpy	o. be	ΔH = breaking bonds – forming bonds	$2C_{(s)} + 3H_{2(g)} + O_{2(g)} + C_2H_5OH_{(l)}$	100 kPa and 298 K	Joules
5	$\Delta\mathcal{H}_r$	Reactants Reaction coordinate	q/n	Pa	The enthalpy change when 1 mole of a substance is completely burned in oxygen, under standard conditions, with all reactants and products in their standard states	
6	Specific heat capacity	endother mic	Potential energy reactants reaction pathway	Bomb calorimeter	$\Delta\mathcal{H}_c$	exothermic

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